Navy Medicine

March-April 2006

Navy Doc Takes The Bronze

Navy Medicine considers for publication photo essays, artwork, and manuscripts on research, history, unusual experiences, opinion, editorials, forum, professional, and clinical matters. Contributions are suitable for consideration by *Navy Medicine* if they represent original material, have cleared internal security review and received chain of command approval. An author need not be a member of the Navy to submit articles for consideration. For guidelines on submission please contact: Janice Marie Hores, Assistant Editor, Bureau of Medicine and Surgery (M09B7C), 2300 E Street, NW, Washington, DC 20372-5300. Email: jmhores@us.med.navy.mil.

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LCDR Richard H. Jadick, MC, received the Bronze Star for actions during the Battle of Fallujah in 2004. Story on page 26. Photo by HM3 Rebecca L. Davila, USN.

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Letter to the Editor

January 4, 2006

Dear Ms. Hores,

After reading your superb article, "Hurricane Aftermath Navy Medicine Responds," all I can say is how can anyone say the federal government and especially the Department of Defense was lacking in the response to the disaster.

Congratulations to all for a job well done.

Very Respectfully,
Hal S. Raper, Jr., D.D.S.
Captain (DC) USNR-Ret

LCDR Richard Jadick (left) with LCOL Mark Winn, USMC (center), executive officer of 1st Battalion, 8th Marines, Regimental Combat Team 7, and RDML Richard R. Jeffries, MC, Medical Officer of the Marine Corps at the award ceremony 30 January at Camp Lejeune, NC. Photo by HM3 Rebecca L. Davila, USN

Gas Chromatograph
The Preventive Medicine Professional's Best Friend

December 2005 marked the return of two Forward Deployed Preventive Medicine Units (FDPMU-East and FDPMU-West), which were responsible for providing preventive medicine expertise in support of Operation Iraqi Freedom. During the course of their deployment, both teams relied heavily upon a specific piece of analytical "gear" to provide "real-time" environmental data to line commanders ultimately responsible for the health and well-being of thousands of multi-national troops in Iraq and Kuwait.

Currently in use by the Navy, a portable Gas Chromatograph (GC) measures volatile organic compounds (VOCs) in order to evaluate service member exposure to toxic materials that can be found on the ground, in the water, and in the air. The portable GC is capable of analyzing over 100,000 chemical compounds that pose a potential threat to our troops. According to CDR Jerry Formisano, Director of Industrial Hygiene for the Navy Environmental Health Center (NEHC), Portsmouth, VA, and portable GC Program Director, "This field capability has gone from concept proposal to execution in less than 8 years. It has been a multi-service effort, with a great investment of time and energy by a lot of talented people. During that time the Navy has been a leader in adapting off-the-shelf technology to the field operator's needs." Additionally, the portable GC provides timely analysis of data for key decision makers in the field. What formerly would take 1 month from collection to analysis, can now be accomplished in 24 hours, meaning that battlefield commanders no longer have to wait for critical environmental data. "We are enhancing our ability to collect real-time data, to allow the operational commander to make informed decisions quickly, based on sound science and accurate information," noted Mr. Steve Sorgen, Senior Scientist for Expeditionary Preventive Medicine with NEHC.

During OIF (II-2), portable GC data played a vital role during the assault on Fallujah as coalition forces prepared to enter the city. Portable GC generated data also helped during the post-assault phase in determining when it would be environmentally sound for Fallujah citizens to return to their homes. LCDR Ray Stiff, executive officer for FDPMU-East, was there. "Having the portable GC allowed us to assess the city's water system prior to return of the citizens," said Stiff.

As FDPMU-East returns to Norfolk to resume their lives as members of the Navy Environmental Preventive Medicine Unit Two, Army preventive medicine (PM) teams will have assumed responsibility for managing public health issues in support of OIF. Due to the enormous success enjoyed by Navy FDPMU's in theater, Army PM's may choose to adopt similar practice protocols in carrying out their environmental site assessments. Stiff concluded, "The ability to provide on-site, real-time data greatly assists the FDPMUs in its risk assessments to the Combatant Commander. Without GC data, our assessments would be limited and not nearly as thorough.

For more information on portable GCs and the Navy FDPMUs, visit the NEHC website at http://www-nehc.med.navy.mil/.

—Story by Hugh Cox, Public Affairs, Navy Environmental Health Center, Portsmouth, VA.

FDPMU Team members employ GC analytical module to detect air contaminents. Photo courtesy of the author

DOD Announces Implementation of Traumatic Injury Protection

On 30 November the Department of Defense (DOD) announced the implementation of traumatic injury protection insurance under the Service members' Group Life Insurance (SGLI) program as enacted by section 1032 of Public Law 109-13. The program, which will be known as TSGLI, is designed to provide financial assistance to service members during their recovery period from a serious traumatic injury. On 1 December all members eligible for SGLI will become insured for traumatic injury protection of up to $100,000 unless they decline

SGLI coverage. A flat premium of $1.00 will be added to the monthly SGLI deduction, regardless of the amount of SGLI coverage the member has elected effective 1 December. TSGLI is not disability compensation and has no effect on entitlement for compensation and pension benefits provided by the Department of Veterans Affairs or disability benefits provided by DOD. It is an insurance product similar to commercial dismemberment policies. TSGLI provides money for a loss due to a specific traumatic event while disability compensation is intended to provide ongoing financial support to make up for the loss in income-earning potential due to service-connected injuries. The retroactive provision of PL 109-13 provides that any service member who suffered a qualifying loss between 7 October 2001 and 1 December 2005 will receive a benefit under the TSGLI program if the loss was a direct result of injuries incurred in Operation Enduring Freedom or Operation Iraqi Freedom. DOD developed this program in close coordination with the Department of Veterans Affairs. The Office of the Under Secretary of Defense for Personnel and Readiness will closely monitor implementation with the services and make necessary adjustments if required.

—Special release from the U.S. Department of Defense.

Senator Secures Federal Funding for Medical University

Uniformed Services University of the Health Sciences received $3.3 million in federal funding to educate future military nurses. Maryland Senator Barbara Mikulski secured the funding and announced its donation at the university 5 January. The money will also assist medical personnel in providing care in the wake of a nuclear, biological, or chemical disaster.

"It is so important to highlight the unique work being done at [the university] because they demonstrate every day that a stronger America begins at home," Mikulski said. "They are providing cutting edge medical research with unique training for military doctors and nurses and programs to bring together military and civilian first-responders to protect our troops on the battlefield and save lives here at home."

The contribution includes a $1 million appropriation to create and manage a free distance learning weapons of mass destruction program open to military and civilian medical students and first-responders. The program will prepare first-responders and medical personnel for potential nuclear, biological, chemical, radiological or high-explosive events. Mikulski said she personally understands the importance of the new program, as she was involved in an anthrax attack on the U.S. Capitol in 2001.

"The weapons of mass destruction program is so unique because it's a distance learning program that's open to anybody," Mikulski said. "A first-responder who works in a rural county can benefit from the program just as much as a medical doctor."

Dr. Charles Rice, Uniformed Services University of the Health Sciences president, said the university will permit other institutions to use the online program as a foundation, add relevant information, then distribute it to the first-responders in their area.

"The access to the education on specific areas covered under this program has been very limited," he said. "We've had people respond to a disaster who haven't been specifically trained or educated on how to deal with its unique aspects. This program will provide a significantly better understanding for first-responders so they can take better care of their patients, as well as protect themselves."

The remaining $2.3 million of the remittance will benefit the university's Graduate School of Nursing. Rice said nursing schools around the country are having difficulties recruiting faculty and his university is no different. He said the lack of nursing staff affects the university's ability to educate new nurses and Congress' contribution will greatly help to educate nurses for instructor positions.

Army MAJ Steve Currier, a university instructor, said it's paramount to invest in the military's medical infrastructure. "We need to provide medical personnel with the best education possible while they're in school. That means it's most beneficial to invest our time and money into their education now, so they will be fully prepared in the future."

—Story by JO3 Matt Bullock, National Naval Medical Center

Do You Have An Upcoming Deployment?

The Medical Deployer page on NKO was specifically designed to help you, the deploying sailor, to refresh your operational knowledge prior to deployment. You can directly access the page by going onto NKO at https://www.nko.navy.mil and going to the Force Health Protection page under "Learning Centers," click on Medical Deployer highlighted on the left side of the screen.

Name Change for FHOTC

On 2 November 2005, the CNO approved a request changing the name of the Fleet Hospital and Operations Training Center (FHOTC), to the Naval Expeditionary Medical Training Institute (NEMTI). This change more accurately reflects the transformation of NOMI's ground warfare component. NEMTI is responsible for training our medical forces assigned to shore-based Level III care as well as acting as NOMI's Joint Experimentation and Sea Trial arm.

Bravery and Heroism of Navy Corpsmen with Marines Set Standard

Navy corpsmen have one of the most dangerous jobs in Iraq and are more likely to face serious injury or death than are the riflemen they're working to help, according to the assistant commandant.

GEN Robert Magnus, Assistant Commandant of the Marine Corps, said 31 January, that statistics from Marine Corps health officials show that the job of the combat medic, or Navy corpsman, is among the most dangerous in the war, in large part because of the situations they put themselves in.

"They're literally moving in and moving out of the fight to get to their patients," he said. "They're among the first to go into battle, and they're right in the middle of it."

Magnus' comments came at the Defense Department's annual conference on military healthcare, which brings together top civilian and military medical officials for 4 days of discussions on the achievements and shortfalls of the system.

In a speech before the 3,000 attendees, he called military medics "a standard of bravery and heroism."

"For the young men and women who wear the uniform, there is no finer (healthcare) system for them while they are on active duty," he said.

Magnus could not provide specific statistics on the number of corpsmen killed in Iraq, but said that they historically have had high casualty rates in combat.

What makes Iraq different from past military actions is the open nature of the war, he said, with injuries occurring in traditionally safe zones as well as the frontlines. That means more work and more danger for medics in every aspect of their mission.

Magnus said the vehicles used by corpsmen typically have lighter armor than their infantry counterparts, to allow for quicker movement and response to wounded troops. That has added to their danger in Iraq because of the insurgents' use of roadside bombs, or improvised explosive devices.

But the Assistant Commandant said the medics provide an invaluable service, not only in treating injuries of U.S. service members but also in providing care to Iraqi soldiers and civilians.

"The same standard of care is given to all patients, and they're doing tremendous work across the coalition," he said. "It's more than just the care they give. It's also the caring."

—Article by Leo Shane. Used with permission from Stars and Stripes, a DOD publication. ©2006 Stars and Stripes.

Corpsman Survives "One on One" with Improvised Explosive Device

The rolling dunes that create the oceans of sand in Iraq remained silent as the sun bore down making even the ground sweat. On 28 January, the sight of blazing flames and the screams of men broke that silence as several roaring truck engines and clanking tailgates moved closer to the blast site.

The Explosive Ordnance Disposal with Marine Expeditionary Unit Service Support Group 24 was responding to another improvised explosive device explosion.

The EOD technicians and the security element Marines were conducting the post-blast investigation and a secondary search, but the unit corpsman accidentally found a secondary device.

HM3 Joseph Roe, a corpsman with 2nd Medical Battalion, 2nd Force Service Support Group and attached to EOD, MSSG 24, had taken a few steps away from the humvee, when a concussion wave from a large explosion sent him whirling through the smoke-filled air like a rag doll and landing in a canal off the side of the roadway.

He was knocked unconscious, but rolling into the water revived him immediately. He stood up and realized something had happened, but he had no idea what.

"How did I end up all the way over here?" Roe asked himself.

Later he learned that three daisy-chained 130-millimeter anti-aircraft projectiles exploded at his feet. But all Roe knew at that moment was he was standing in chest deep water and he wasn't dead.

Completely confused and disoriented, he finally decided to run up the embankment toward his Marines.

"I have to find out who else is hurt?" Roe thought. "They need me!"

Roe hurried up the hill and stumbled toward his sergeant who immediately asked to see his hand.

"I had put out my right hand, but for some reason I didn't even look at it," said Roe. "All I was thinking to myself was, "'Why does he sound so far away when he's standing right in front of me? Why is his voice muffled when he speaks? Why do I have a loud, constant ringing in my ears?'"

Roe's sergeant helped him walk over to one of the humvees so he could treat his hand.

"I realized I couldn't walk very well," Roe added. "It seemed like my right hip wasn't working, but I still didn't know why."

While walking, Roe look down at his right hand and saw his index finger was gone - only shards of bone remained.

"Now I'm really upset," Roe said, "because that was my trigger finger."

That's when it hit him. He had been injured. He didn't know how, but he knew his finger needed to be treated quickly. He still couldn't hear very well, so he just started screaming.

"I was telling them where my medical supplies were and how to patch me up," said Roe. "I quickly calmed down though, because I knew not to worry once my Marines started treating me. I knew they were qualified because I trained them correctly. I knew then, I was in good hands."

After his hand was bandaged, he sat on the roadway and waited for the medical evacuation.

When it arrived he walked onto the land assault vehicle, refusing to be carried. From there, he was airlifted to the Surgical/Shock Trauma Platoon, where he was treated and sedated. After a series of flights, he finally arrived at Brooke Army Medical Center in San Antonio.

"I can remember waking up in the Intensive Care Unit to my wife saying, "'Welcome home, you're in Texas.'"

Roe was treated at BAMC for 30 days. He participated in occupational therapy, physical therapy, and counseling that he still attends today.

"It's weird, because I didn't realize at the time how injured I was." said Roe. "I can see now that I am missing 2 1/4 fingers on my right hand. I can see scars from the fragmentation burns on my face and forearm. I'm aware of the dent in my right hip, which still hurts and causes me to walk with a slight limp. I have aches and pains the majority of every day. But all of this is small potatoes, because of the simple fact that I am alive."

CDR Dave Gibson, CO, 2nd Medical Battalion, 2nd FSSG, awards the Purple Heart to HM3 Joseph Roe 20 October 2005. Photo by LCPL Matthew K. Hacker, USMC

Roe has been through a horrific ordeal. He has experienced things most people hope they never have to. But his goal after the attack was to be strong and survive so he could see his family again.

Roe is just happy to be back home with his wife and children, whom he thanks for their unconditional love, support, and admiration.

"I just want to thank my family for everything," said Roe. "I want to thank them for never standing in front of or behind me, but always next to me."

He is already back on his feet and serving his battalion by instructing Marines and sailors on combat life-saving, force protection, the individual first aid kit, and medical and casualty evacuation procedures.

"I share my experiences from Iraq and the knowledge I've acquired during the classes," Roe said. "I just want to make sure I pass on all the knowledge I have to young men and women who may take my place when I retire."

"Life is a lot more special to me now, and I look at things a lot differently," said Roe. "I've adopted a new motto since that day, 'Live everyday to the fullest as if it were your last, because you never know.'"

Roe received his Purple Heart Medal during an awards ceremony 20 October, and when that medal was placed in his hand he felt nothing short of a miracle, according to Roe.

"I am truly honored to have received this award," Roe added sincerely. "I know the history and the meaning of this special medal, and I'm thankful I'm alive to receive it."

Roe's exterior wounds are healed now, but he still suffers from slight memory loss due to being diagnosed with post percussion syndrome and a traumatic brain injury to his frontal lobe.

Roe continues to recover and hopes that one day he can return to working at what he loves … aiding and saving the lives of Marines on the battlefield.

—Story by LCPL Matthew K. Hacker, USMC, 2nd Force Service Support Group.

Physical Therapy Technician Keeps Marines Battle Ready

HM2 Carlos A. Lopez, as a physical therapy technician, helps Marines get back into the fight.
Photo by CPL Adam C. Schnell, USMC

Known as one of a Marine's best friends, the Navy field corpsman spends most of his time keeping Marines healthy and battle-ready while operating in the most hostile combat environments. HM2 Carlos A. Lopez, not only spends his day performing basic corpsman duties but also keeps Marines in the fight as a physical therapy technician. "Muscle-skeletal injuries are my bread and butter," said Lopez. "It is a great feeling when you see a Marine who was hurt but after a treatment plan, is back to doing everything he did before he got injured." As a physical therapy technician, Lopez treats patients on an almost daily basis for common injuries in Iraq, dealing with knees, ankles, and lower back problems.

When a Marine comes into the battalion aid station with a muscle-skeletal injury, they see Lopez, who spends time taking down symptoms, performing a physical exam, and then coming up with a treatment plan. After talking with the medical officer and gaining approval, Lopez puts his treatment plan into effect, hopefully bringing the Marine back to 100 percent combat effectiveness. "Seeing people progress from an injury to being 100 percent again is what makes the job great," Lopez said. Becoming a physical therapy technician in the Navy takes weeks of training.

Because it was something Lopez really wanted to do, he got his chance to see what the therapy course had to offer after going on a deployment and being part of two different Marine units. The 8-year Navy veteran got to test his skills as a physical therapy technician right after graduating the course. He was stationed at Naval Station Great Lakes, IL, where he worked for almost 3 years with Navy recruits performing initial training. "It was there I really found out physical therapy was my thing," he commented. "It was most rewarding actually seeing the recruits fully recuperate, graduate, and become a part of the Navy." Along with his physical therapy technician duties, Lopez treats sick and wounded Marines who come from the field. He also helps treat Iraqi civilians and ensures the battalion's area is free of insurgent activity. "When a wounded Iraqi civilian comes in and has to be treated, I don't see any difference than any other patient we have in here," Lopez said. "To me, a patient is a patient; there is no difference." Helping the medical officers is something Lopez would like to do once finished with his deployment. His plans include finishing his associate's degree and putting in a package to be a physician assistant, which will further his career he hopes lasts longer than 20 years.

—Story by CPL Adam C. Schnell, USMC, 2nd Marine Division.

Desert Dental: Corpsmen Help Fight Tooth Decay in the Field

There is a small group of warriors here whose weapons aren't your typical M16 A2 service rifle, but tools that protect welfare just as well. Their enemy is a small one, called plaque, and they are here to stop it. They are the members of Dental Detachment Camp Taqaddum, 2nd Marine Logistics Group (Forward) and they are here fighting tooth decay and cavities, as well as providing care for other dental emergencies in Iraq.

The detachment has stepped onto the frontlines to support fellow service members and Iraqi forces who play a central role in Iraq's liberation and march toward democracy, said CAPT Andrew D. Peters, DC, Dental Detachment commander. "We try to be the best-trained, best-prepared," Peters said. "We maintain the operational dental readiness of the forces here in Iraq." The goal of the dental detachment here is 100 percent dental readiness, which means all dental needs of forces are taken care of. Preparing units in the rear and pre-deployment training is essential to making the mission easier for the dental detachment. "When we are back at Camp Lejeune, we take care of all dental emergencies and ensure forces are taken care of before they come over to Iraq," he said.

CAPT Loren J. Steenson, DC, works on a patient at the Dental Detachment, 2nd Marine Logistics Group (Forward). Photo by LCPL Wayne Edmiston, USMC

"Also, we train continuously to deploy in support of operations." Serving in Iraq offers an opportunity for the dentists and dental technicians to truly do their job. "This is what they train for," Peters said of the detachments personnel, "to perform dentistry in a deployed environment. We have a huge responsibility to ensure our forces are prepared dentally."

Most recently the detachment demonstrated their flexibility by doing dental work at Camp Habbinayah, a nearby Iraqi Army camp. "We were getting a lot of emergency patients from Iraqi soldiers, so we decided to coordinate a dental mission to help them, and cared for multiple personnel that were in acute pain," said Peters. "It played a big part in improving relations with the Iraqis and providing a service that the Iraqis have never had." For the more junior sailors at the detachment, working in such a small shop means handling a multitude of responsibilities. "In the rear we would have a very specific job," said HM3 Iris D. Mansel. "All day long you are doing chair-side assistance, working at the desk and everything else that needs to be done in the clinic."

In any clime or place, the warriors of desert dental will be here to provide support alongside service members to ensure their teeth are taken care of. "In Iraq, we are truly defining the field of dentistry," Peters said.

—Story by LCPL Wayne Edmiston, USMC, 2nd Marine Logistics Group.

Corpsman Brings Experience, Excellence to Surgical Company

HM1 Edward A. Magrill, an independent duty corpsman (IDC) with Surgical Company, Combat Logistics Battalion 2, 2nd Marine Logistics Group (Forward), dropped everything, including his career as a paramedic to improve the lives of sailors and Marines. He serves in the Level 1 care facility at Al Asad Surgical, providing for the basic needs of all his patients. "As an IDC, I am a primary provider," Magrill said. "I do everything such as routine evaluations, x-rays, lab tests, prescribe medications, and even assisting with casualties that come in."

Being able to care directly for a patient is what attracted Magrill to being an IDC, and he has loved it ever since. "I love the autonomy with my patients," he said. "Being able to see my care all the way through, and making them feel better; it's a great feeling." Respect is one thing Magrill has earned from his peers with both his

HM1 Edward A. Magrill stands in front of his "domain." Photo by LCPL Wayne C. Edmiston, USMC

Navy and civilian experience. "It's what I call the 'ah-ha factor.'" he explained.

"It's when I teach a young corpsman something new, and they understand. That's what I love about teaching."

With all the joys that Magrill has experienced being an IDC, he does have some trials as well. "The hardest part about the job is you don't have a magic wand you can wave and make everyone better," he said. Magrill looks forward to the future where he wants to further his career in medicine. "I hope to finish my bachelor's degree soon and apply for medical school," he said. "I want to become a doctor in emergency medicine." Magrill looks forward to returning home to his wife Amy, and his three "children": CeeCee, Devil, and Angel his three canine companions. Whether at home or treating a patient in Al Asad, Iraq, Magrill always applies his skills as a teacher, paramedic, and hospital corpsman, and he always does it with a smile on his face. "I just love making a patient feel better," he concluded.

—Story by LCPL Wayne C. Edmiston, USMC, 2nd Marine Logistics Group.

EMF Kuwait Sailor Gains Citizenship

It was a proud and memorable day for HM3 Martha Stamp as she became a U.S. citizen during a naturalization ceremony on 15 December, at Camp Arifjan, Kuwait.

"When I recited the oath of allegiance I could feel tears streaming down my face. It was such a proud moment for me and is something I will never forget," Stamp said.

She is one of 23 personnel representing all branches of the U.S. military who took the oath of citizenship that day.

For Stamp, currently deployed to Expeditionary Medical Facility (EMF) Kuwait, it has been a journey of nearly 10 years in the making. A native of Roatan, Honduras, Stamp moved to the United States in 1996 on a Resident Card (also known as a Green Card), with several of her siblings.

Stamp joined the Navy a little more than 2 years ago, and was very disappointed when she learned she could not vote in the last presidential election.

Determined to make a difference and live the American dream, Stamp applied for citizenship while stationed at Naval Hospital, Pensacola, FL.

Since a 2002 law allowed U.S. military members to apply for citizenship, thousands have taken the oath to live the American dream. Very few, however, have had the opportunity to take the oath and claim the title of "American Citizen" while deployed to a combat zone.

Reflecting on her new opportunities as a citizen, Stamp said, "I don't hear too much in Honduras about people my age having a dream and living that dream. They're not exposed to the opportunities Americans share on a daily basis. I am really looking forward to choosing my own leader, to make my own choices, and to achieve my dreams. As an American I now know I can do this."

Army MGEN James Kelley, Deputy Commanding General for Coalition Forces Land Component Command, Mr. Mathew Tueller, Charge d'Affairs, U.S. Embassy Kuwait, and Mr. John Bulger, District Director, U.S. Citizen and Immigration Services officiated at the ceremony.

—Story by HMCS(FMF) Fred Kasper, USN.

MGEN James Kelley (left) presents the Certificate of Citizenship to HM3 Martha Stamp as Mr. Mathew Tueller and Mr. John Bulger look on. Photo by HM3 Marika Steenblock

Taqaddum Trauma Platoon Fights for Life

Nestled among the abundance of tents here is a place where nothing short of miracles are performed at the hands of skillful individuals. This ragtag platoon is an assortment of doctors, nurses, and hospital corpsman from all over the country.

The members of the Surgical/Shock Trauma Platoon, Combat Logistics Regiment 25, 2nd Force Service Support Group (Forward), are an elite group of Marines and sailors designed to take the most serious of emergency medical patients from all over the area of operation. The platoon's battle is not on the kinetic battlefield. However, it fights to save lives, which is supported by the motto, "Pro Vita Batuimus," which in Latin translates to "For life, we fight."

"We deal with urgent surgical and trauma patients that consist of a lot of blast injuries and abdominal wounds," said Laurie M. Rook, an independent duty corpsman with SSTP, "After stabilizing them, we move them to a higher echelon of care."

The SSTP is made up of 72 Marines and sailors, and is broken down into security and transport personnel, physicians who specialize in family practice to doctors with assorted surgical backgrounds, nurses, anesthesia teams, multiple technical specialties, and independent duty hospital corpsmen all from up and down the East Coast, Rook said.

The platoon's varying work environments in the past have never been like they are here, according to many of the individuals who work at SSTP … Rook explained that her many years of experience as a hospital corpsman have never brought her to such a high-paced trauma environment. "It's different than any other medicine of this type in the Navy," Rook explained.

Personnel in the platoon find this environment quite enjoyable and satisfying. This is what many of them have been training for as long as they have been in the Navy, said LT Ron W. Cleveland, NC, an emergency room trauma nurse. "I find it very rewarding," Cleveland explained. "I've been a commissioned Nurse Corps officer for 6 years and have been here for 6 weeks and I feel this platoon is the highlight of my career."

Though the work is rewarding, it's the teamwork that gets the platoon through every day. The platoon is made up of medical personnel from all experiences and educational backgrounds, said LT Victor M. Diaz, NC, a nurse anesthetist. "We all have a specialty and come together as a team," Diaz explained. "It's that team concept that you can really see here at SSTP, that you don't see as defined in other arenas."

HM3 Kayla M. Long and HN Timothy M. Vannes prepare a patient's intravenous fluids. Vannes and Long are both triage corpsmen with SSTP. Photo by LCPL Wayne Edmiston, USMC

One thing the SSTP does not do is turn away anyone who needs immediate medical attention.

The SSTP treats everyone from American active duty forces, civilians and Iraqi Security Forces to wounded insurgent forces, explained Rook. "We don't turn anyone away if it's a true life or limb trauma," Diaz said. "Just yesterday, we took two pediatric civilians, one that probably would have died if untreated."

All the patients arrive in various ways, but many arrive by casualty evacuation via helicopter from the battlefield. After being stabilized the patients are moved to a better equipped, long-term care facility within the area of operation, Rook explained.

Part of the uniqueness of SSTP is that even though sailors and Marines have their own respective specialties, they can always fall back on their basic medical skills and instincts. "Regardless of whether you're a surgeon or a corpsman, you never know when you have to draw blood or be a litter bearer; you have to be very flexible," Diaz said.

Some junior enlisted corpsmen find their experiences at SSTP a true first hand learning experience.

Many of these experiences are cases that less experienced corpsmen have never seen first hand until arriving here in Iraq, said HN Timothy M. Bammes, a triage corpsman. "Many of the cases I have never seen first hand and only read about or practiced," said HM3 Kayla M. Long. "It's great to experience a lot of new and different things here."

This team of miracle workers will continue to fight and save the lives of our service members while deployed in Iraq, so service members can continue fighting the war on terrorism.

—Story by LCPL Wayne Edmiston, USMC, 2nd Force Service Support Group, Kuwait.

Healing in Harm's Way

Naval Hospital Bremerton has kept up a steady presence in Iraq and Afghanistan with officers and hospital corpsmen deployed to Marine units in combat. These personnel are regularly recognized for their bravery with medals and citations describing their actions abroad.

Corpsmen have been serving in Marine units since the Marine Corps was founded. As the Marines' mission expanded to ground combat, the corpsmen went with them. "Navy corpsmen are some of the most highly decorated sailors in the Navy," said LTJG Richard Beale, the Operational Readiness division officer.

"Almost every corpsman in a grunt unit will wind up in a hot zone," added HM2 Benjamin Wilder of NHB's Operational Readiness Department. Wilder himself was recently awarded a Navy Achievement Medal with Combat Distinguishing Device for actions during a firefight in Iraq while working with the 1st Marine Division on 13 November 2004.

Wilder's unit had set up an observation post in an abandoned jailhouse in the town of Husaybah near the Syrian border when they were attacked by local insurgents. They attacked with machine gun fire and rockets, keeping Wilder busy treating shrapnel and concussion wounds, moving to the sites of heaviest fighting in search of wounded Marines. "I was on the go quite a bit, but fortunately for us the enemy isn't quite as trained as we are," he said.

HM2 Benjamin Wilder (right), of Fleet Hospital Bremerton, stands with two fellow corpsmen, HN Sumanese Singh (left), and HN Joshua Huston, of Bravo Company, 1st Battalion, 7th Marines, 1st Marine Division, Camp Gannon, Husaybah, Iraq. Photo courtesy of HM2 Benjamin Wilder, USN

Where Wilder went beyond expectation, though, was when he responded to calls for help from the rooftop machine gunner. While moving around the building, Wilder kept hearing the calls for ammunition coming from the gunner. When he came across the Marine with the spare ammunition out of reach, Wilder took the ammo up himself, exposing himself to enemy fire to ensure the machine gun's suppression fire would continue.

"City fighting is usually taking some fire, but it's over quickly. And, frustratingly, you may never see the enemy," he said. By contrast, the firefight at Husaybah lasted more than 3 hours and involved dozens of insurgents. "You don't really feel this extreme fear. It's a hyper awareness to what's going on," he said. "Afterwards is when you attribute the fear to it."

While Wilder's award was to recognize his courage under enemy fire, other corpsmen show just as much bravery in dealing with the after-effects of enemy attacks. HM3 Benjamin Peterson, currently working at the Branch Health Clinic PSNS, received his own award for his life-saving actions while stationed in Iraq.

Peterson was a line corpsman with the 1st Battalion/7th Marines on 14 November 2004 when the convoy he was with was struck by a suicide bomber as they were leaving Al Q'aim, Iraq.

"Anytime we travel down the road, we wave the other cars off," Peterson said. "They're supposed to orient themselves away from us, but this one just rolled along the side of the road until it dove in."

Peterson said the car specifically targeted a humvee in the center of the convoy and blew up an estimated 200 lbs of TNT, flipping the humvee off the road and setting it on fire. Peterson said he was about 100 yards away when the explosion happened, and he immediately ran forward to tend to the survivors.

Even though there was no longer any enemy to face, Peterson still had to face a burning vehicle that was firing off ammunition as the fire reached the weapons. Peterson said there were bullets, rockets, and claymore mines still detonating as he raced toward the humvee. "We had to eat dirt until the machine gun finished," he said. "You could hear the bullets zipping by."

In addition to the explosions, Peterson said this was an extremely high stress moment because this was the first time he'd been the lead man. "I was the hands-on guy," he said. "All the other operations it was the Marines taking charge, but this time it was up to me." Peterson and his partner were able to get to the vehicle and pull out the survivors before the humvee was completely destroyed.

For his lifesaving efforts in the face of danger, Peterson was awarded his Navy Achievement Medal with Combat Distinguishing Device in July of 2005.

Chief Personnel Specialist Romeo Labonete is the leading chief petty officer for NHB's operational readiness department and, over the past year and a half, he's seen more than 50 individual corpsmen deploy for duty with the Marines. "I see about 80 percent of those come back with combat designators," he said.

Labonete has found the corpsmen who deploy are pretty gung ho to go, too. "When we get a tasker (assignment) here, we have to choose just one from a list of volunteers," he said. "It really shows you the mind set here." With so many volunteers to choose from for each assignment, Labonete said he takes pride in being able to send his best people as demonstrated by the personal awards NHB sailors such as Wilder and Peterson earn while deployed in harm's way.

—Story by JO2(SW) Fletcher Gibson, USN, Naval Hospital Bremerton, WA.

Naval Hospital Pensacola Surgeon Awarded Honorary Doctorate from Republic of Georgia

CAPT John A. Perciballi, MC, the Georgia Sustainment and Stability Operations Program (GSSOP) U.S. Task Force medical officer, was recently awarded an honorary doctorate degree by the Tbilisi State Medical University (TSMU) in Tbilisi, Republic of Georgia.

Perciballi, a general surgeon attached to Naval Hospital Pensacola, FL, received the rare distinction because of the lecture series on combat medicine he gave at the university. "It was a surprise to me," Perciballi stated. Perciballi, who gave 11 lectures, was awarded the degree by the TSMU director during a formal ceremony.

"The idea came from the director and his faculty of the university," said Dr. Joseph Maisuradze, a specialist in resuscitation and external medicine at TSMU. "I was very glad to see this happen."

"Everyone on the faculty approved of the idea of awarding Dr. Perciballi an honorary degree," Maisuradze stated.

"I have attended all the lectures and I find them very interesting and informative, especially because I work on the faculty of critical external medicine, formally called military medicine," said Maisuradze. "Critical medicine is very close to military medicine."

One of the Georgian Army doctors who participated in the GSSOP training at the Krtsanisi Training Area was responsible for the initial meeting between Perciballi and Misolrevi. "Dr. Perciballi was introduced to me by my former student Mr. Gongliashvili, who worked in Krtsanisi Training Area as a doctor," Maisuradze pointed out.

Perciballi's role in Georgia includes direct medical support to the GSSOP U.S. Task Force and medical training for Georgian troops.

"My stated mission is to provide medical support for the GSSOP Marines participating in this mission. There's quite a few live-fire exercises and we're here for any contingencies that may arise." said Perciballi. "An enhancement to that is we also took on the training mission, training the Georgian troops in elements of combat medicine as they transition from the old Soviet system to the NATO system."

The Navy surgeon, who was born in Hondo, TX, but reared in Chelmsford, MA, 30 miles northwest of Boston, is a graduate of the Uniformed Services University of the Health Sciences, in Bethesda, MD. Perciballi is an Operation Iraqi Freedom veteran who worked on a number of combat related injuries in the opening stages of OIF.

Part of the GSSOP Task Force mission is to assist and enhance Georgia's capability to sustain its contribution to the effort in Iraq. "After reporting aboard here for the GSSOP program I went to the medical school and talked with their head of extreme medicine about a combat medicine lecture series," said Perciballi.

"They were very interested in combat medicine because with this war on terrorism, those principles are now very important to our civilian community," he added. "They're very interested in what we've done in the Gulf War, and Operation Iraqi Freedom. I was the officer in charge of Forward Resuscitative Surgical System Team 4, and was deployed during the mobile phase of the war in March 2003," said Perciballi. "I was mostly with Task Force Tarawa. My area of operations was in the southern part of Iraq, Camp Viper, Camp Chesty, and Camp Anderson."

Perciballi has also been helping the school staff create a new curriculum for combat surgery and combat medicine.

According to Maisuradze, Perciballi's lecture series is the basis for a significant portion of TSMU's developing curriculum. "We now are developing training courses for students and doctors based on material given by Dr. Perciballi," Maisuradze said.

Perciballi opened the GSSOP medical facility to the medical school senior faculty to show them what a

Dr. Perciballi (left), officer in charge of the medical detachment, instructs task force members that include (left to right) Radiology Technician HM3 Maureena Sosa; LCDR Mark Duncan, a family physician; anesthesiologist LCDR Bobby Shelton; and Preventive Medicine Technician HMC Alexander Fernandez. Photo by LCDR Michael Gonzalez, NC

Mobile Medical System (MMS) with the latest medical technology looks like. The GSSOP medical facility is a combination of a sick call and laboratory building and an MMS, and boasts everything from mobile generators to a portable digital x-ray machine.

As with all Marine led operations, the GSSOP is at the cutting edge of 21st century warfare doctrine and is a foreshadow of the Foreign Military Training Unit of the newly formed Marine Special Operations Command being added to U.S. Special Operations Command.

Perciballi's work with TSMU is a clear illustration of how U.S. personnel working with foreign militaries have a strong tendency to become involved in the greater welfare of the host nations they are working in.

Perciballi's lecture series, while not specifically outlined in the GSSOP mission, was in keeping with the spirit of GSSOP—for the U.S. to help its friend Georgia in achieving peace and stability in the Caucasus region and victory in the war on terror.

Naval Hospital Pensacola, which recently was named the Department of Defense's No.1 mid-size military hospital in the country for patient satisfaction, also has the distinction of having the highest percentage of its staff deployed in the global war on terrorism, said NH Pensacola Commanding Officer CAPT Matt Nathan.

The hospital has between 11 and 14 percent of its staff deployed at any one time—compared to the overall Navy average of 4 percent. The hospital has personnel deployed in Iraq, Kuwait, Eastern Europe, Cuba, the Horn of Africa, and ships at sea.

—Story by SSGT Jonathan C. Moor, USMC, Marine Corps News and PAO, Naval Hospital Pensacola, FL.

Navy Dental Center Comptroller Earns Bronze Star

LT John G. Meeting, MSC, the comptroller for the Naval Dental Center, was awarded the Bronze Star during an awards ceremony 16 December for his service while deployed in support of Operation Iraqi Freedom 04-06.

In January 2005, Meeting deployed as the commander for Surgical Company A, 2nd Medical Battalion, 2nd Marine Logistics Group. Meeting's company deployed to Kuwait to relieve a National Guard unit. "There were about 100,000 service members in Kuwait at the time we got there, so it was a little confusing for the first few weeks," said Meeting. "We were responsible for setting up medical clinics on all but one camp in Kuwait, so we had to get used to it."

The company, which consisted of 162 sailors, was spread out over an area roughly the size of New Jersey, according to Meeting. For the first 2 months, each clinic estimated 400 patients per day. Their sparse clinics were the sick call and the emergency facilities in Kuwait, Meeting pointed out.

They also developed several new standard operating procedures (SOP) for the clinics, as the Army used different supply and medical programs unfamiliar to the Navy and Marine Corps family. "We did adopt certain Army SOPs, because the supply points were already getting the orders their way and we couldn't change it," said Meeting. "But we did develop more SOPs for emergency response situations."

Second Marine Logistics Group's Chief of Staff, COL Stephen W. Otto, presented LTJG John G. Meeting, MSC, with the Bronze Star. Photo by CPL Matthew K. Hacker, USMC

They didn't see many combat injuries being in Kuwait, but there were a lot of motor vehicle accidents, Meeting said. They also developed a combat lifesavers program for the Army units who came in during their stay.

According to Meeting, there were many opportunities to do great things. The unit saw more than 22,000 patients in their 6 months in Kuwait, and their "find a way to say yes" motto kept their patients happy and healthy.

—Story by CPL Matthew K. Hacker, USMC, 2nd Marine Logistics Group

Medical Chief Takes Home the Bronze Star

On Wednesday, 23 November 2005, Naval Hospital Bremerton commanding officer, CAPT William Roberts, MC, awarded HMC(FMF) Richard Boldt with the Bronze Star.

During his 194-day deployment as part of Operation Iraqi Freedom, Boldt helped set up a medical clinic at the Iraqi Military Academy at Al Rustamiyah (IMAR). While there, Boldt maintained it and trained the Iraqi medical personnel who would eventually succeed him.

But for Boldt, it didn't take long for him to realize the gravity of the situation in Iraq. In fact, only 2 days into his assignment, he might even say it began with a bang.

While driving within the confines of the Al Rustamiyah compound, an explosion ripped through a camp wall less than 100 yards from his position. Boldt jumped out of his vehicle. Stunned, he hesitated only for a moment. Then he pulled his pistol from his holster and made his way toward the scorched hole in the wall.

"It happened pretty fast," Boldt recalled. "I'm not exactly sure what went through my mind when it happened, I just remember seeing the wall being ripped open. I wasn't sure if the attack was coming from on or off base."

He and several other coalition members quickly secured the scene and discovered a 107mm rocket had partially exploded. Its remnants remained embedded less than a yard from the main road.

Boldt and his comrades halted the street's traffic and cleared all civilians from the area. Soon, the emergency action plan was initiated, the rocket was eventually cleared away safely, and no injuries were reported.

However, Boldt is quick to point out that many U.S. military installations commonly undergo similar attacks. It's a part of life that he and fellow service members wearily accept.

HMC(FMF) Richard Boldt answers questions from the media prior to receiving the Bronze Star. Photo by PH3 Douglas Morrison, USN

But in this case, the explosion marked the only time he'd hesitate while in Iraq. The challenges ahead would make momentary pause impossible.

Boldt's journey began in March when he volunteered to deploy as the Senior Medical Advisor with the Multi-National Security Transition Command-Iraq. Eventually, he'd become the Senior Medical Department Representative Instructor for the academy as well as the Medical Advisor for the base medical clinic.

Being the only Coalition medical person attached to IMAR, he found himself responsible for ensuring the well-being and medical readiness of more than 400 coalition, NATO (North Atlantic Treaty Organization), Iraqi military staff, and officer cadets assigned to the camp.

On top of that, he and eight Iraqi medics provided emergency care for more than 1,000 Iraqi civilian nationals and 2,735 Iraqi Intervention Force (IIF) soldiers stationed at Camp Al Rustamiyah. But as demanding as these responsibilities were, Boldt would soon find himself shouldering even more responsibility.

Early into his deployment, the current IMAR Iraqi physician abruptly resigned his position; thus an enormously important medical position needed immediate filling. Boldt didn't hesitate. He stepped into the role as acting physician and ensured that cadet training continued as scheduled. During that 3-week period, he coordinated and performed 220 cadet physicals. "In all honesty, my corpsman training and prior experience working with Marines prepared me for the experience and I was ready for whatever happened over there," said Boldt.

Even after the physician job was filled, it was only on a part-time basis. Therefore, Boldt had to continue to fill in

on the physician's days off for an additional 4 weeks until a permanent medical officer was appointed.

"Of course it's a huge weight on your shoulders, but you do what you have to do and, at the end of the day, everything happened the way it was supposed to happen," he remembered. "We had to work a few extra hours and do some things we weren't used to, but we did them, got the cadets into school, and they're doing very well now."

Watching the cadet's progress through the 42-week school was the highlight of his tour, said Boldt. "For me, the best part was watching these students graduate and witnessing the pride on their faces," he said. "It was very rewarding to see them become soldiers."

Additionally, Boldt conducted medical field training with Iraqi medics on numerous exercises, oversaw both Iraqi and Coalition sick calls, and handled all emergency and routine medical cases as they occurred.

Perhaps, most importantly, Boldt directly advised the base commander on how best to accomplish the Medical Department's mission in view of the command's overall mission.

"My job was as a trainer and as an advisor," he said.

But despite the impressive list of accomplishments during his deployment, Boldt humbly refused to accept credit for his actions. "I'm the custodian of this award," he said of the Bronze Star.

So what began with a bang ended with the bronze. And as for Boldt, he's happy to be back in Everett with his wife, Gina, and their four kids. "Being deployed and away from your family really puts things in perspective," he smiled. "It's good to be home."

—Story by JOC(SW) Daniel Sanford, USN, Staff Writer for The Northwest Navigator, © 2004 Sound Publishing, Inc.

Hospital Beaufort Sailor Receives Bronze Star

GEN Richard Tryon, Commanding General Marine Corps Recruit Depot Parris Island, Eastern Recruiting Region, presented the Bronze Star to HMC Peter J. Curtiss, Leading Chief Petty Officer, Radiology Department, Naval Hospital Beaufort (NHB), Beaufort, SC, on 21 November 2005.

Curtiss received his award for exceptionally meritorious service while serving as the base Chief Medical Corpsman while deployed with the multi-national Security Transition Command-Iraq in support of Operation Iraqi Freedom III from 21 March to 6 September 2005.

HMC Peter J. Curtiss receives his Bronze Star. Photo courtesy of author

Curtiss was notified of his impending deployment in January 2005 and left for Fort Benning on 28 February 2005. Following 2 weeks of in-service training, uniform issue, and paperwork, Curtiss departed for Kuwait. After a few days of "in-country" classes, Curtiss arrived at his final destination, Coalition Military Assistance Training Team (CMATT), Kasik Military Base, augmenting the 2nd and 3rd Infantry Divisions Regional Support Base. As the senior enlisted leader, Curtiss was responsible for training Iraqi clinic staff in a myriad of topics, including basic medical technician, preventive medicine inspections, and combat lifesaving.

According to Curtiss, language was not a barrier out on the battlefield. "We had two Iraqi lieutenants who spoke excellent English. Plus, the clinics had interpreters to help with translating with patients," he said. "Sometimes it took a little time."

Curtiss said that after 6 months of working closely with the Iraqi military, he and his group were able to make a positive impact. "We trained over 700 people in the Combat Lifesaver Course in a 2-month period and also trained six of them to be instructors," said Curtiss. He also stated that he could definitely see a change in the attitudes of the Iraqi people as they move towards embracing the democratic way of life.

—Story by Patricia Binns, Naval Hospital Beaufort, SC.

Oklahoma Reservist Awarded Bronze Star

CAPT Dennis R. Staggs, MC, was presented the Bronze Star during an awards ceremony held dur-

ing a drill weekend in December at Naval Operational Support Center Tulsa. The Bronze Star is awarded for heroic or meritorious achievement of service in connection with operations against an opposing armed force. "I am humbled by the Bronze Star because of the corpsmen, medical officers, and Nurse Corps officers whose shoulders I stood on to attain this award," said Staggs. "I am grateful for their efforts." Staggs received the award for his effective leadership and devotion to duty during his deployment to Iraq in support of Operation Iraqi Freedom from September 2004 to January 2005. Serving as Force Surgeon, Assistant Chief of Staff, G-4, for I Marine Expeditionary Force, Staggs supervised 19 level I and five level II medical treatment facilities, ensuring the effective care of more than 18,000 disease and non-battle injury patients and more than 2,000 combat trauma casualties. He also oversaw the development of proactive medical plans for the battle in Fallujah in Operation Al Fajr. The captain's efforts resulted in triage, treatment, evacuation, and definitive care being provided to more than 900 casualties encountered by coalition forces with an unprecedented low mortality rate. During the critical national election period and Ashura and Arba'een pilgrimage, Skaggs coordinated contingency military and humanitarian medical efforts in the Al Anbar province. By obtaining funding for Arabic instructors and procuring appropriate medical textbooks, Skaggs facilitated the critical medical training of Iraqi Security Forces. His overseeing of preventive medicine programs resulted in high immunization rates, low heat casualty and indigenous disease rates, and a non-battle injury illness rate below the expected level for deployed forces.

—Story by JO2 Melissa Mullin, Naval Operational Support Center, Tulsa Public Affairs.

Hospital Corpsman Receives Bronze Star

HMC(SW/AW/FMF) Patrick L. Hyde, of the Naval Medical Education and Training Command (NMETC), received the Bronze Star from BGEN Eric B. Schoomaker, the Army's Chief of the Medical Corps and Commanding General, Medical Research and Material Command, Fort Detrick, during a ceremony at the National Naval Medical Center, Bethesda, MD, on 8 December 2005 for meritorious service while serving in support of Operation Iraqi Freedom.

Hyde received the award for his efforts while serving as the Independent Duty Corpsman (IDC) in his unit. During his deployment, he established field sanitation procedures, developed a monitoring system for water treatment, and initiated the Typhoid vaccine program for Iraqi forces.

While presenting the Bronze Star award, BGEN Schoomaker said, "Chief Hyde is a true American hero … it is a great honor to present an Army award to a Navy corpsman."

Hyde was part of a Multi-National Transition Command-Iraq since March 2005 and worked directly with U.S. Army soldiers and Polish and Ukrainian forces to equip, train, and mentor Iraqi medical personnel. During his Iraqi deployment, he served as the unit IDC, singlehandedly providing medical care for the task force until he was injured by an improvised explosive device that detonated on a returning convoy 8 July 2005.

Although bleeding profusely himself, Hyde continued to provide care to his injured comrades and instructed others to perform life-saving procedures until help arrived via helicopter. He was subsequently awarded the Purple Heart for his injuries.

RDML Carol I. Turner, Commander of NMETC, stated, "I am very proud of Chief Hyde's accomplishments while serving in Iraq. He is an impressive role model for our staff at NMETC and an outstanding representative of the Hospital Corps for our Navy and Marine Corps team."

Hyde reflected on his deployment saying, "As I go through my experiences in Iraq, I look back and I can say that it was an honor and a privilege to have served in Iraq with the Army and the coalition forces as part of total force medicine."

—Story by Dwayne J. Hathaway, Naval Medical Education and Training Command, Public Affairs, Bethesda, MD.

BGEN Eric B. Schoomaker presents HMC(SW/AW/FMF) Patrick L. Hyde with the Bronze Star citation. Photo by HM1 Deborah A. Dyer

Navy Preventive Medicine Team Lends a Helping Hand to Earthquake Victims in Pakistan

On 8 October 2005, just before 0900 local time, a powerful earthquake measuring 7.6 on the Richter scale, struck northeast of Islamabad, Pakistani, a forest-clad mountainous region near the Indian border.

The initial quake was followed by a series of aftershocks, with magnitudes ranging between 5.4 and 5.9. To date, it is estimated that more than 80,000 people have perished from the quake, and more than 4 million people are displaced and/or homeless.

Within a week of the earthquake, the Navy Environmental and Preventive Medicine Unit SEVEN (NEPMU-7), Sigonella Italy, received deployment orders to provide preventive medicine assistance and other public health services in support of humanitarian operations in Pakistan. The team, a sub-set of a Forward Deployable Preventive Medicine Unit (FDPMU), and comprised of one preventive medicine physician, one environmental health officer, and one preventive medicine technician, arrived at Chaklala Pakistani Air Base, Islamabad on 17 October.

While the first few weeks of Operation LIFELINE involved the provision of medical care and surgical treatment to the injured, instituting public health and sanitation measures emerged as a top priority. Furthermore, disruption of the pre-existing infrastructure, in addition to the approach of winter, prevalent co-morbidities, and crowded displaced persons camps have subsequently resulted in widespread communicable disease transmission.

All these variables have helped formulate the FDPMU's concept of operations, articulated as follows:

1. To provide basic preventive medicine services to American military personnel at Chaklala Air Base and Qasim Army Air Base during earthquake relief operations in Pakistan.

2. To initiate and maintain public health measures and disease surveillance in support of total force health protection.

3. To perform the Environmental Health Site Assessments (EHSA) on Chaklala and Qasim Air Bases as per current DOD instructions (DODINST 6490.3).

Amazingly, this "three-man team" has successfully juggled multiple capabilities as defined by the mission requirements which include disease surveillance; water, soil, and limited air sampling for volatile organic chemicals; sampling for inorganic chemicals in water; identification of fecal coliform contamination in water; general camp sanitation, hygiene, and habitability inspections; limited vector surveillance and control; food service inspections; and most of the Environmental Health Site Assessment (EHSA).

"Doing more with less" has been somewhat of a mantra for this FDPMU, in light of the necessity for maintaining a reduced footprint in theater. According to LCDR Nishith Kishor Jobanputra, preventive medicine physician and Team Leader, "Our responsibilities were to U.S. service members and the maintenance of their public health needs. Initially this included approximately 600 persons at the two camps, but eventually involved approximately 1,200 service members and four camps, although the two additional sites (212th MASH in Muzaffarabad and III MEF MLG field hospital in Shinkiari) had organic preventive medicine assets and were self-sustaining."

The team's contribution to the relief effort extended beyond the services provided to U.S. Forces supporting the relief mission. For example, LCDR Jobanputra, along with a U.S. Air Force International Health Specialist (IHS), attended twice-weekly World Health Organization (WHO) and Pakistani Ministry of Health meetings at the Pakistan Institute of Medical Sciences, in order to liaise with other international organizations involved in the relief effort. Both individuals were involved in coordinating logistics issues vital to the success of the program, such as the transportation of tents, provision of vaccines, and other public health services. They also participated in the recruitment of Pakistani local nationals and medical volunteers to staff the U.S. field hospitals in order to bolster sustainment of medical services. Additionally, LCDR Jobanputra and his Air Force counterpart gained visibility on disease surveillance and outbreak situations, garnering support from military leadership for continued involvement of U.S. military personnel in such matters.

All that said, the operation was not without its challenges. According to Jobanputra, limited insight into overall disease surveillance resulted in an increase incidence of usual diseases of concern in a humanitarian assistance operation. "As an added complication to our overall visibility, we were unable to access the WHO website dedicated to the earthquake response (www.whopak.org/disaster)," added Jobanputra.

After successfully completing its initial preventive medicine mission, the FDPMU was re-directed on 22

November to the 212th MASH in Muzaffarabad to conduct medical outreach efforts. "It was evident that the chain of command was keenly interested in conducting medical outreach efforts, similar to those performed by non-governmental organizations (NGOs) and other international organizations (IOs)," noted Jobanputra. The FDPMU personnel were assigned as augmentees to the seven MASH preventive medicine assets (U.S. Army Center for Health Promotion and Preventive Medicine [CHPPM]—Europe). The 10-member team was tasked with initiating and conducting vaccination outreach programs within the vicinity of Muzaffarabad, a sizeable city near the disputed Kashmir border and less than 10 km from the earthquake epicenter. "We were to reach those children less than 15 years of age who remained unvaccinated despite extensive NGO/IO efforts," said LCDR Jobanputra.

The WHO National Vaccination Campaign targeted children under 15 years of age to receive the following vaccines: diphtheria-tetanus-pertussis (DTP) for those <7 years old; tetanus toxoid for those >7 years old; measles-mumps-rubella (MMR); and oral polio (OPV). The team also provided tetanus toxoid to adults, particularly to pregnant females. All told, the 3 FDPMU personnel (along with the 7 CHPPM-Europe individuals) provided 9,164 vaccinations to 3,250 schoolchildren and over 60 adults. They've worked collaboratively in order to conduct displaced persons camp sanitation and preventive medicine assessments for greater than 20 camps (addressing public health needs for more than 12,000 displaced persons). Additionally, they've assisted with base camp sanitation issues and coordinated reports to the Pakistan Ministry of Health and WHO/United Nations.

In response to a recent measles outbreak, the regional WHO office asked the preventive medicine team to obtain serum samples from any current cases and possible contacts. The outbreak had involved the death of a 10-month-old boy and an unknown number of associated cases; serum samples were apparently unavailable and likely had not been obtained. On 7 December 2005 the team convoyed 44 kilometers to Hattian Bala and Ghari Dopatta in Pakistani Kashmir. According to LCDR Jobanputra, "Upon arrival at the implicated camps, we determined that there were no recent cases and that several children were recuperating. The outbreak had apparently terminated, so we drew serum from three convalescing children who had dermatologic scarring consistent with the rash associated with measles. The serum samples all turned out to be positive for measles. During the return trip, we stopped at a few more camps and field hospitals (including the Canadian field hospital in Ghari Dopatta), where we were informed that no new cases of measles had been observed in the prior 2 days." In addition to the measles outbreak, LCDR Jobanputra, whose medical sub-specialty is in tropical diseases, was also consulted on several patients who had suspected diphtheria, helminthic infections, and fevers of unclear etiologies.

With the preventive medicine outreach mission well in hand, including significant improvements to vaccine coverage for Pakistani children affected by the earthquake, the team departed Pakistan on 20 December 2005. Thanks to the dedicated efforts of FDPMU personnel, Navy medicine was able to play a vital role in support of humanitarian relief for the victims of the Pakistan earthquake.

—Story by Hugh Cox, Public Affairs, Navy Environmental Health Center, Portsmouth, VA.

MPT&E BULLETIN Center of Excellence for Navy Medicine

The Navy Medicine Corporate Executive Board approved the establishment of the Manpower, Personnel, Training, and Education Center of Excellence as an 0-6 command under the NAVMED Support Command with a standup date of 1 October 2006. This command will include many of the functions currently existing within NMETC along with manpower and personnel execution functions currently residing in M1 at BUMED. The structure aligns closely to a line Learning Center with the major directorates addressing Workforce Management, Sea Warrior transformation (5VM, Knowledge Management and the Integrated Learning Environment), Functional Integration and Workforce Development. The mission of the Center will be to execute the MPT&E strategy for Navy medicine in support of the Fleet, Expeditionary Medicine, Military Treatment Facilities and other customers and in coordination with the Line MPT&E organizations utilizing the Sea Warrior model. The Center is responsible for over 40 enlisted corpsmen (HM) professional continuums and 100 officer medical, medical support, nurse, and dental specialty continuums.

New Commanding Officer at NSHS, San Diego

CAPT Florence M. Crosby, MSC, took command of the Naval School of Health Sciences (NSHS) in San Diego, CA, in a ceremony held on 10 November 2005. Her most recent assignment was Director, Medical Service Corps Education and Training Programs at the Naval Medical Education and Training Command in Bethesda, MD.

Sollock Takes Command of Naval Hospital

In a traditional change of command ceremony held 11 January, CAPT Ronald L. Sollock, MC, assumed command of U.S. Naval Hospital Guantanamo Bay, from CAPT John S. Edmondson, MC. MGEN Jay Hood, USA, Commanding General, Joint Task Force Guantanamo, was the ceremony's guest speaker. Dr. Sollock's most recent assignment was in the office of Medical Inspector General.

New Commanding Officer at NOMI

CAPT Barney R. Barendse, NC, took the helm at the Naval Operational Medicine Institute in Pensacola, FL, in a ceremony held on 30 November 2005. His most recent assignment was executive officer of U.S. Naval Hospital, Guantanamo Bay, Cuba, and as Deputy, Joint Task Force Surgeon, Detention Operations, Guantanamo Bay, Cuba.

Director of the Navy Nurse Corps, RDML Christine M. Bruzek-Kohler presents HM1 Dexter Lewis with the Purple Heart and citation for injuries sustained during combat while in Iraq with the 2nd Marine Expeditionary Force.
Photo by JO1 Russ Tafuri, USN

CAPT William Roberts, CO, Naval Hospital, Bremerton, WA, presents the Purple Heart to HN Matthew Parzych. Parzych received the Purple Heart in a ceremony 20 January for injuries he received while serving in Iraq 28 January-13 September 2004. Photo by HM3 Marika Steenblock USN

HM3 John T. Fralish, 30, of New Kingstown, PA, was killed on 6 February when enemy forces opened fire on a U.S. patrol north of Methar Lam in Laghman Province, Afghanistan. Fralish was attached to the 3rd Marine Division, Marine Corps Base, Kaneohe, HI.

HM3 David S. Sotelo, 22, of Murrieta, CA, was killed on 4 January in an accident involving a light armored vehicle, outside San Diego, CA. Sotelo was attached to the 3rd Light Armored Reconnaissance Battalion based at Twentynine Palms, CA.

Navy Medical History Interest Group

The Bureau of Medicine and Surgery, in conjunction with members of the retired Navy medical community, is supporting the establishment of a Navy medical history forum.

Scholars and practitioners (civilian and military)—and other interested persons—are invited to join in.

The purpose of the forum will be to provide an environment of "mutual support" for information exchange, and for the research and publication of Navy medical history material.

If you are interested in taking part, please e-mail your contact information to CAPT Tom Snyder, MC, USN, (Ret.) at thomaslsnyder@gmail.com

Dionel M. Aviles, acting secretary of the Navy, speaks with HM2 Robert Delatee during breakfast in the dining facility at Camp Fallujah, Iraq. Photo by LCPL Michael J. O'Brien, USMC

HM2 Eric Schaefer treats a young girl in a small Philippine fishing village where Beachmasters have established a landing zone for landing craft from USS *Harpers Ferry* (LSD 49). *Harpers Ferry,* along with USS *Essex* (LHD 2), and elements of the 31st Marine Expeditionary Unit (MEU), arrived off the coast of Leyte to provide humanitarian assistance and disaster relief to the victims of a landslide. Photo by JO2 Brian P. Biller, USN

HM1 Rodrigo Martin with Headquarters and Service Company, 3rd Battalion, 3rd Marine Regiment, searches for medicine to give a local man during a medical visit in the vicinity of Khowst, Afghanistan. Photo by CPL James L. Yarboro, USMC

NAVY MEDICINE
World Class Care...Anytime, Anywhere

CDR Joseph Taddeo, MC, debrides the arm of a 3-year-old Pakistani boy in Shinkiari, Pakistan. The boy suffered second degree burns on most of his left arm and was brought to the field hospital for treatment. Dr. Taddeo is a general surgeon with U.S. Naval Hospital Yokosuka, Japan, and was assigned to Combined Medical Relief Team-3 in Pakistan. Photo by LCPL Scott M. Biscutti, USMC

Secretary of the Navy, the Honorable Dr. Donald Winter, meets with staff members at the National Naval Medical Center during a visit with wounded sailors and Marines. Winter thanked the hospital staff for their efforts, saying their positive attitude and personal care for the wounded troops is clearly making a big difference. Photo by JOC Craig P. Strawser, USN

ADM Michael G. Mullins, CNO, visits sailors from the Surgical Shock Trauma Platoon on Camp Taqaddum Iraq, during his visit to the base 2 January 2006. Photo by SGT Fernando Frias, Jr., USMC

Navy Water Survival Training Center instructor, HM2 S.M. Creveling (right), observes LCDR Greg Friedman as he tests parachute equipment at Naval Station Norfolk. The parachute techniques class uses computer graphics to simulate landing situations the students may encounter during actual missions. Photo by PHAN Casandra Newell, USN

HN Blanca Horvath from Seal Team 1 provides a routine medical check-up on an Iraqi construction worker at Camp Habbaniyah, Iraq. Photo CPL Bryson K. Jones, USMC

Integration of Medical Simulation into Training Programs

The Chief of Naval Operation's (CNO's) Guidance for 2005 stated, "Expand the use of simulators to enhance training and efficiency and to replace outdated training systems, per Task Force Simulation."

The Naval School of Health Sciences (NSHS) San Diego, appreciated the value of simulation training years before the release of the CNO's Guidance. Recognizing that students of the 21st century best learn and expect interactive educational modalities, NSHS San Diego, a subordinate command of the Naval Medical Education and Training Command in Bethesda, MD, created a Human Patient Simulator (HPS) lab in 2002. Equipped with an HPS from Medical Education Technology, Incorporated (METI), NSHS San Diego began the process of simulation integration into various programs. Named EDDIE for Education through Direct Diagnostics In a safe Environment, students from the independent duty corpsman (IDC), certified registered nurse anesthetist (CRNA), and physician assistant (PA) programs were the first to take advantage of this new technology.

IDC instructors began exposing their students to EDDIE during testing week as a means of evaluating medical crisis management. CRNA and PA students utilized the technology for advanced clinical skills training and research. As word spread about the positive aspects of simulation training, personnel from Naval Medical Center San Diego began incorporating the simulation technology into their own training programs, such as nurse internship, physician internship, and physician residency programs.

At present, NSHS San Diego's HPS lab is home to three METI simulators—two adult and one child called EDDIE, EDDIE III, and EDDIE Jr., respectively. Each of the simulators respond hemo-dynamically appropriate to the various interventions applied, enabling the learners the opportunity to visualize in real time the effects of their actions, or in some cases, inaction.

For example, learners can see and compare the effects of oxygen deprivation on the young and healthy verses the aged and infirmed models. Learners may practice an assortment of specific clinical skills, as well as practice various team building and communication exercises with the HPS. In a single 3-5 minute scenario, learners can experience the emotional roller coaster ride of nearly losing a patient, identifying their mistake, then taking swift decisive action to save their patient's life.

Despite all that can be with HPS, the direct effect of simulation training on performance continues to be an unquantifiable measurement. The aviation community has been using simulation training for many years, yet it is still difficult to establish a specific cause and effect link between simulation training and fewer plane crashes. Similarly, medical emergencies occur for a variety of reasons and require very specific medical interventions, often in a specific sequence. With consideration to human emotion, performance in a lab cannot always be transferred to performance in real life. We can only rely on logic and assume that with repeated simulation training, "practice will make perfect" and "repetition will aid in retention."

Notwithstanding this inability to link simulation cause and effect with performance outcomes, a number of aspects of simulation education at NSHS San Diego have been measured. Since its grand opening in 2002, the HPS lab has hosted over 1,300 participants in numerous simulation scenarios, ranging from bedside medical treatment of anaphylaxis to major trauma management. HPS lab participants include civilian and military physicians, nurses, paramedics, emergency medical technicians, cardiovascular technician students, respiratory therapy students, along with IDC, PA, and CRNA students.

In a survey of 170 lab participants from various medical specialties, there was overwhelming praise for the technology and a desire for simulation as a standard element in their training programs. Participants believed the simulator learning experience was both valuable and realistic and could not have been achieved via standard classroom methods, such as lecture or video. Participants' comments routinely emphasized the usefulness of being able to see the effects of their actions in real time and adjust treatment as necessary. Even when EDDIE was "killed," participants were able to recognize what went wrong during the debrief, and still experience substantial learning from the scenario. Participants overwhelmingly reported enjoyment with their simulation experience.

Recognizing the yet untapped potential of worldwide simulation education, NSHS San Diego worked with the Naval Personnel Development Command in Norfolk, VA, to obtain and link a state-of-the-art blended learning classroom to the simulation lab. This classroom is truly a first in true blended-instruction design, capable of delivering "just in time" worldwide education and training. It is linked to a Navy sponsored training network and is equipped with multiple plasma screen televisions, multimedia computers, cameras, interactive audio, and student monitoring capability. This technology enables a group of students to participate in a simulation session at NSHS San Diego while a separate group(s) observes and interacts with them from medical units in Okinawa, Japan, Portsmouth, VA, and/or aboard USS *Stennis* (CVN-74).

CAPT Robin McKenzie, Executive Officer, NSHS San Diego said, "The use of the blended learning classrooms and human patient simulators leveraged the power of technology and made an important impact in our ability to deliver the right training at the right time. This directly supports the CNO's Revolution in Training and provides the opportunities for our sailors to maximize their potential."

In accordance with the CNO's 2005 guidance, now is the time to take medical simulation technology to the next level. As the military aggressively works to revolutionize the education and training of personnel, the extensive integration of medical simulation technology is a must. Simulation technology clearly meets the needs and desires of today's students as well as the needs of the today's military.

—Story by CDR Melissa Quinones, NC, Human Patient Simulator Lab Coordinator, Naval School of Health Sciences San Diego, CA.

Determining Clinical Productivity in Navy Optometry

Rising medical costs along with the expansion of healthcare benefits for retirees, guardsmen, and Reservists, continue to put stress on the Military Health Care system (MHS), setting the stage for increased emphasis on productivity. The importance of clinical productivity was made clear in Navy medicine's fiscal year 2006 (FY06) Business Planning Guidance that stated that it is Navy medicine's objective to increase the planned productivity numbers as much as practical for submission to Health Affairs (HA) for FY06. To this end, the use of relative value units (RVU) has become an important measure of a clinical workload, as they quantify the labor associated with a single encounter. In the past, commands have individually set production goals; however, this year (FY06), each command was issued production and financial targets, including benchmarked workload standards for providers.(*1*)

For most clinical specialties, workload standards were based on large studies such as those provided by the Medical Group Management Association (MGMA). These studies provide productivity target values for both number of encounters and relative value units. A study providing productivity data for RVUs does not exist for optometry or most ancillary healthcare professions. In the absence of other data, the Camp Pendleton Provider Productivity Study (CPPPS) conducted in October 2003 was used as the clinical benchmark for Navy optometrists during FY06 business planning process. The CPPPS provided a target value for number of encounters; however, no standard was recommended for physician workload RVUs. Data evaluated for the 05-OPPS showed that Optometrists currently average approximately 1.7 physician workload RVUs per patient encounter, but the range is large and varies from less than one RVU for reduced services such as vision screening to over three RVUs for complicated examinations. This suggests that numbers of encounters, by itself, is a poor measure of productivity. Despite the lack of RVU data, the business-planning tool used for FY06 still required an RVU target for optometry and commands were forced

Table 1 Fiscal Year 2005 Optometric Productivity M2 Data Analysis

	Encounters	Work RVU	RVU/Encounter
Mean	2247.52	3853.18	1.73
Standard Deviation	749.19	1293.13	0.28
SD Above Mean	2996.71	5146.32	2.01
SD Below Mean	1498.32	2560.05	1.45
Range	250-4290	476-7908	0.8-2.74

to default to using historical data. Developing a clinical benchmark for Navy optometry that included an RVU standard would align optometry with other healthcare professionals and improve productivity planning.

The goal of the 05-OPPS was to determine the clinical productivity of active-duty Navy optometrists and to use the data as a basis for the development of an RVU based productivity model.

Methods

Provider Productivity—During FY05 there were 124 active duty Navy optometrists practicing in more than 60 locations. Clinical productivity was determined by obtaining and analyzing data from the Bureau of Medicine and Surgery's (BUMED) central repository for expense and workload data (M2). The total number of simple RVUs and encounters for FY05 were pulled for every provider using optometry's medical expense and performance reporting system (MEPRS) code BHC, provider identification (provider ID), and Defense Medical Information System Identification (DMIS ID). The DMIS ID is the nomenclature assigned to each military treatment facility (MTF). To clean up the data, non-privileged and part-time providers including technicians, Reservists, and visiting doctors were removed. Optometrists with less than a year of data were also excluded, such as individuals entering into or leaving duty under instruction assignments (DUINS), providers releasing from active duty (RAD or RET), new accessions, and personnel out filled to other billets. Several providers had multiple entries under different DMIS IDs, while other providers had multiple provider IDs under the same DMIS ID. Multiple entries were usually attributed to permanent change of station (PCS) moves, optometrists serving multiple clinics with multiple MEPRS codes in which they had different provider IDs, or a provider undergoing a legal change of name. Multiple entries of the same provider cause a fractionalization of their total productivity and artificially reduce the mean and other measures of central tendency. When possible, data from the same provider ID was combined to indicate the total productivity of that provider.

This resulted in a sample size of 87 full-time active-duty Navy optometrists practicing in 54 locations. The sample included 4 Navy captains, 9 commanders, 22 lieutenant commanders, and 52 lieutenants. The mean, range, and standard deviation were then determined for number of encounters, total number of work RVUs and RVU/encounter ratio for each provider.

Patient Population—The patient population data for Navy optometrists was obtained from the Enrollment & Population data available on the TRICARE Operations Center (TOC) web site. Enrollment was downloaded in pivot tables and sorted by branch of service (BOS). The total number of impaneled patients was then divided by the total number of optometrists to produce the provider to patient ratio.

Access to Care—Information regarding access to care was obtained from access to care reports also downloaded from the TRICARE Operations Center. Reports for fiscal months 1-6 of FY05 were downloaded as pivot tables and sorted by BOS and then MEPRS code BHC. The appointment kept rate data was combined into a single Excel spreadsheet and averaged.

Results

The results of the study are listed in Table 1.

Discussion

Although no civilian RVU data was available, the annual number of encounters by Navy optometrists for FY05 compares well with civilian productivity studies, such as the National Benchmarks published in the February 2005 edition of Optometric Management and those published by the American Optometric Association (Table 2).(*2-3*) Note that the Camp Pendleton Productivity model demonstrates a significant departure from

Table 2 Comparison of Optometric Productivity Data for Encounters

Model	Annual Encounters
National Benchmarks Summary Feb 2005[2]	2016
American Optometric Association Sep 2002[3]	2168
FY05 Navy Optometry Productivity Oct 2005	2248
Camp Pendleton Provider Productivity Oct 2003[1]	3700

other retrospective studies. This is probably a reflection of the smaller, narrower sample size used in the CPPPS study. Patient population size can have a significant effect on clinical productivity, and because the enrolled patient population size and demographics for TRICARE are not normally distributed among MTFs, having a large sample size obtained from many clinics is needed to make accurate measures of central tendency.

The American Optometric Association has not performed a study of provider to population ratio for over 20 years. However, in 2003 the Air Force developed a detailed business case analysis attempting to quantify expected costs, revenue and return per optometrist.(*4*) At the time of the study the average population served by one Air Force Medical Service (AFMS) optometrist was found to be 12,500. Based on the enrollment and population data available on the TRICARE Operations Center website, the current optometrist to patient ratio for the Navy is about 1:13,498. Populations by site were grouped into age categories and graphed by site to show the stratification of different patient pools. After all dynamics were considered, the right population size required to achieve a balance between clinical demand and provider capacity in the USAF study was 9,000 per optometrist. The USAF study further found that populations over 30,000 do not require optometrists at the same rate as smaller populations. For populations above 30,000 beneficiaries, a second tier was added at a rate of 1 per 15,000. What makes the AFMS study particularly relevant is that it was performed on a military patient population. Therefore, intrinsic to the study are both the effect of beneficiary category as well as demographic risk factors unique to military populations. In our study, many of the providers falling below one standard deviation from the mean for number of encounters and/or work RVUs were serving patient populations below these recommended values.

Impaneled population size and actual population served are not necessarily the same. For example, the number of enrolled patients to U.S. Naval Hospital Naples is approximately 13,000. This includes Naval Branch Health Clinics, Gaeta, La Maddalena, Capodichino, London, and St. Mawgan. Of these clinics, La Maddalena, London, and St. Mawgan receive primary eye care services almost entirely from the local civilian preferred provider network. This reduces the effective patient population served by the optometrist at NH Naples by 4,872, resulting in a population size of 8,128. On the other hand, patients participating in TRICARE for life or TRICARE Standard are usually not enrolled to a particular MTF and receive care on a space available basis. The enrolled patient population data for MTFs providing services to a large number of these "non-enrolled" patients will not be reflective of the true impaneled population size. There are several MTFs that fall in both of these categories which may explain why some clinics appear to have sufficient patient populations but still fall below the mean for number of encounters, while other clinics are well above the mean for productivity while serving seemingly smaller patient populations.

Another factor affecting productivity is the appointment kept rate. The appointment kept rate is defined as the total number of encounters minus no shows and cancellations. Based on the access to care reports available on the TRICARE Operations Center, the mean appointment kept rate for fiscal months 1-6 FY05 was 73.36 percent. This means that the average optometrist loses over 25 percent of their productivity to no-shows and cancellations. While the average optometrist is scheduling about 3,064 patients per year, they are actually seeing only 2,248.

Finally, data quality can affect clinic productivity, particularly data associated with medical coding and billing. The average number of relative value units earned per encounter can be used as a measuring stick for data quality. Average RVU/encounter values greater than one standard deviation from the mean are suggestive of under or over coding. For many specialties the average number of RVUs generated per patient encounter is well established, but since measuring RVUs for optometry is so new, we do not have standardized values available for comparison. Further analysis of productivity data will be needed to refine any recommended standard. However, because the total number of encounters performed annually by Navy optometrists correlates well with civilian studies, the total work RVUs as well as the RVU/encounter ratio found in this study should represent an accurate base line value.

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—Story by LT Peter Gunther, MSC, Optometry Clinic, USNH Naples, Italy.

Navy Physician Takes the Bronze

Richard H. Jadick was a Marine for 6 years before accepting a Navy scholarship to medical school. From 8-18 November 2004, he merged his 6 years as a Marine and his years as a Navy physician to save the lives of more than 90 Marines, sailors, and soldiers. These deeds garnered him one of the most prestigious awards the Marine Corps can bestow—the Bronze Star with a combat V for valor.

It is not often that a Navy doctor receives a Bronze Star, but LCDR Jadick received this award in a ceremony on 30 January at Camp Lejeune, NC. Dr. Jadick served as the Battalion Surgeon with the 1st Battalion, 8th Marines, Regimental Combat Team 7, 1st Marine Division in Operation al-Fajr (meaning dawn in Arabic) in Fallujah, Iraq. At the time, it was one of the last insurgent strongholds in the area. In November 2004 at Fallujah, the Marines were engaged in some of the worst urban combat since the battle for Hue City during the Tet Offensive in 1968.

"Normally, a battalion surgeon just offers medical treatment. But Rich is a former Marine officer, so he was not only a doctor, he was a leader," says LCOL Mark Winn, the unit's battalion executive officer during the operation, and the one who nominated Jadick for the medal. "In my 17 years in the service, through the Gulf War and then Iraq, I've never seen a doctor get a Bronze Star. He is more than deserving of it," Winn said.

The harrowing journey began on 9 November 2004, when a call came for immediate evacuation of a Navy SEAL with a sucking chest wound. Aware that time was of the essence with this kind of wound, Dr. Jadick decided to go to the casualty. Boarding an armored ambulance, Jadick rode into the fighting in order to stabilize the patient as soon as possible. While small arms fire and rocket-propelled grenades (RPGs) impacted the area, the casualty was loaded into the ambulance. Dr. Jadick began administering medical attention, stopped the bleeding, and saved the sailor's life.

As the patient was being transferred at the exchange point another call came in. A group of Marines were caught in intensive fire across the street from the Government Cul-

Photo courtesy of Dr. Art Smith, MC, USNR (Ret.)

Dr. Richard Jadick (bottom row, second from left) is pictured with Navy corpsmen and U.S. Army National Guard medics in front of the building they worked out of in Fallujah, Iraq.

Photo by HM3 Rebecca L. Davila, USN

LCDR Jadick with HM1 Richard Lees, his LPO in Fallujah, and HMC Russell Folley his LCPO in Fallujah.

tural Center. Once again, Dr. Jadick boarded the ambulance, went with the team to the Casualty Collection Point (CCP), and assumed control of treating and evacuating casualties. However, the small arms and RPG fire had become so intense that he could no longer continue the resuscitative care. Jaddick then made the decision that evacuation back to the battalion aid station was the next move.

While loading the casualties from their covered position to the ambulance they began to receive intense RPG fire. One RPG careened off the top of the ambulance and another bounced off the wall in front of the vehicle. Despite the firefight going on around him, Dr. Jadick stood in the open hatch of the ambulance directing the loading of seven patients into a vehicle meant to hold four. All seven critically wounded Marines and sailors were evacuated, with six of the seven surviving their wounds.

On 10 November, Dr. Jadick became aware that the fighting was hindering the evacuation process. Fearful that the wounded would not survive the trip to the field hospitals, he convinced LCOL Winn that the evacuation was taking far too long. LCOL Winn then allowed Dr. Jadick and his corpsmen to move into the government complex and set up a casualty collection point and forward aid station.

Although it was a walled complex, there were gaps in the barriers and the insurgents could climb taller buildings around it. "So the enemy had direct observation and direct fire into the complex," LCOL Winn said. "So anytime we were out of the buildings, we had to run."

On 11 November, immediately following the deployment of the aid station, the team received 18 priority and urgent casualties, all with extreme life-threatening battle injuries. Under continuous insurgent fire, Dr. Jadick steadfastly directed the initial triage, quickly providing emergent care, and coordinating three mass casualty evacuations during the day.

The next day he ensured triage and care of 22 Marines who were brought to the aid station; 90 percent were casualties requiring urgent care. While his team worked in the open on 13 November, Dr. Jadick observed muzzle flashes in the buildings in front of the aid station. He alerted the Mobile Assault Platoon to the location of the snipers and they eliminated the threat.

Over the 11-day period, Dr. Jadick and his team treated a total of 90 combat casualties, 60 of whom came within the first 3 days.

Dr. Jadick stated that "the award is obviously a team-driven award. I was just a part of a group of people that did a lot of good things. I can't give these guys enough credit," he said. "These are kids who didn't know anything about medicine. We were so tired, and we just kept getting casualty numbers," he said. "We'd take care of 8, and 12 more would show up. We worked a lot of hours and they learned how to do a lot of things really quickly. At the end of the day, attitudes were always pretty high. These guys never flinched, none of them. The ultimate reward is when, for whatever stroke of luck, the one you're working on lives." he said.

Although Dr. Jadick considers the award a high honor for his unit, he is most gratified by the recognition his corpsmen received from the Marines, sailors, and soldiers they cared for.

Dr. Jadick will remain on active duty throughout his 4-year residency in urology at the Medical College of Georgia. "Serving with those guys is an honor. I'd go again if they needed me."

—Story by Janice Marie Hores, Assistant Editor, *Navy Medicine*.

Tiger in the Night

As a battalion physician with the 3rd Medical Battalion in Vietnam, LT G. Gustave "Gus" Hodge had seen just about every type of wound the North Vietnamese and Viet Cong could inflict. That was before he saw what a hungry four-legged enemy could do.

On the 11th of February 1967, I came in from the field and joined Delta Company, 3rd Medical Battalion, which was at Dong Ha. We had five GMOs [general medical officers], an orthopedic surgeon, a general surgeon, and a couple of anesthesiologists.

At Dong Ha, we were seeing between 1,500 and 1,800 battle casualties a month. Quite a number of people were brought in post-concussion from mortar or rocket attack.

One incident created a lot of interest. A Marine was brought to our triage area with an unusual wound in his right arm. I asked him what had happened and he said that he really wasn't sure. Something had picked him up and shook him like a rag doll. I examined the wound and found an avulsion [torn-away tissue] of the anterior right arm with significant damage to the biceps and some individual punctures.

He thought that he had been bitten by a tiger. Everybody ridiculed this notion, but after looking at the wounds, we felt that this was most likely the case. He had said that he and his comrades had taken off from Route 9 and gone into the bush. They climbed up a hill and began digging in for the night. He was in a shallow foxhole with his arms out of the foxhole with his rifle across the edge. Just about the time he began to doze off, the tiger grabbed him by the arm. The Marine began beating the animal with his fists and didn't know whether he hit it in the nose or the eye, but it let go and headed down the hill. He grabbed his rifle and fired a couple of rounds at the retreating mass but didn't think he hit anything. Suddenly he realized that he had just shot his rifle so he couldn't have lost his arm. He told us that at first it didn't hurt but for a burning sensation.

We cleaned up the wounds. According to my notes, he went out to the *Sanctuary* for further treatment on April 17, 1967.

CPL David Schwirian of Lima Company, 3rd Battalion, 3rd Marines was the tiger's victim. He had been ordered to set up an after-dark ambush along Highway 9 west of Ca Lu just south of the DMZ and not far from the Laotian border. The young Marine never suspected that a four-legged enemy lurked nearby.

I set up in the middle and had a machine gunner on one side and a rocket man on the other with an automatic weapon. The radioman was to my right and my corpsman was behind us. We were on a turn so that we could fire in either direction down the road in case something came up from either direction.

We were making radio checks every half hour by clicking

the mike key on the radio. We wouldn't talk but just key the mike. There was a code–either 1 or 2 clicks. This was about 11 or 11:30 at night and you couldn't see a hand in front of your face. There was supposed to be a click but I didn't hear it. I was reaching over to see whether my radioman was awake or whether he made that connection. When I reached over, the tiger grabbed my right arm from behind. I didn't know it was there until it grabbed me and, at that time, I didn't know what it was.

I thought I had punched him in the nose but I'm not sure that happened. On these patrols I kept a K-bar knife in between my legs because I always sat up. Well, that K-bar was missing; we don't know what happened to it. I don't know whether I stuck it in the tiger or it just got lost in the shuffle. I heard nothing until the tiger ran away. It sounded like a freight train. The whole thing took milliseconds; it was very quick.

I don't remember what happened right after that because I went into shock. There was no pain. I had no feeling in that arm whatsoever. The tiger had severed the nerve because he had taken so much muscle out. And because it was so dark, there was no way to see what the damage was. The corpsman had one of those Bic lighters and was able to assess what had happened. He said I was in bad condition and he needed to get me out of there.

The corpsman was trying to patch me up and call out on the radio without any lights. Because it was so dark, the first time he tried, he wrapped the microphone from the radio up in the bandages and had to take it all apart and re-do it. He was trying to get permission to break the ambush, but back at headquarters, they were having a hard time trying to comprehend what was going on. So it took them 30 minutes or so to decide to let us break the ambush and leave.

Photos from www.gettyimages.com

The corpsman and I decided that I would walk back with him as far as I could until I couldn't walk anymore. Then he would give me morphine. Up until that point, I had no feeling in the arm and it wasn't hurting.

About two-thirds of the way back I got to the point where I had probably lost so much blood I couldn't go any further. So they took some rifles and ponchos, made a stretcher, and carried me the rest of the way in.

We came to a bridge we had to cross and had to do it single-file and I have no idea how we did it with no lights. We were trying to move as quickly as possible to get back inside the perimeter before we got caught by the enemy. That was a big concern and that's why we wanted to break the ambush as soon as possible. When that tiger got me, I must have made enough noise to wake up Laos.

They carried me back to the company at Ca Lu because there were restrictions that kept them from flying the choppers. When daylight came, they put me in a jeep, and a squad riding in a dump truck escorted us back to Delta Med.

At the same time, they sent another squad back to the ambush site during the daylight and found the tiger tracks which confirmed that it was a tiger.

I remember a corpsman pouring some saline solution on my arm and I went ballistic. I think he had given me a shot underneath my arm and when he put the saline on it to clean it, I went out and was out until they were wheeling me down the ramp from the chopper into the USS *Sanctuary*, and down a hallway right into the operating room. I didn't know how serious my wounds were, but later they told me I was within millimeters of losing my arm. The tiger had taken my bicep and just removed everything on the front side of the arm down to the bone.

The surgeon put everything back together but left the wound open for 2 or 3 weeks while I was on the ship so it could be cleaned out to prevent any infection. They also gave me the 14-day series of rabies

shots. After that, they did a skin graft, taking the skin off the front of my legs. There's no muscle in there. The skin graft just covered up the area.

I spent about 30 days or so on the *Sanctuary* and then they shipped me back to the Philadelphia Naval Hospital. There a Dr. Smith did a tendon transplant so I could use my hand. He used tendons that went to my shoulder, and my shoulder muscles help to move my hand. Then I was discharged.

I have a lot of problems but the arm is useable. I can't lift anything; I've got no strength because I have no muscles.

HM2 H. Paul Churchill was on duty at Delta Med the night they brought in CPL Schwirian.

That night, we heard that a medevac helicopter was coming in so we got up and ran down to the pad. Dave [Schwirian] was on that helicopter and when it landed we grabbed a stretcher and took him in.

Truthfully, I don't remember the other wounds; I remember the arm. He was on the stretcher and his arm was beside him. It was almost as though a surgeon had removed his biceps. The humerus was lying there perfectly clean and just white as snow. It wasn't even bleeding. Doc [Dan] Fuss did a great job out there in the field. It was unbelievable.

We had to apply saline to hydrate it because it was already drying and the surface was beginning to scab over. We then wrapped it and got him ready to move on to the next stop which was the hospital ship. We basically cleaned and wrapped it. At that time, we routinely used Furacin. There was also a Furadantin impregnated gauze I used on burn victims in the field. I'm not sure that's what we used but we covered the wound with something to protect and keep it hydrated until we could medevac him to where they could do some real surgery.

There were other tiger incidents. Even before that attack, I was on a patrol probably 8 or 10 clicks north of the base camp. There were eight or nine of us. I was walking in a line with a Montagnard PF [Popular Forces] behind me who was carrying a grease gun [.45 submachine gun]. All of a sudden, he opened up and nobody saw what he was shooting at. We motioned to him to ask what he was shooting at. He took his hand and made like a big mouth closing and growled. He then pointed at my pants. I looked down and there was blood on my pants leg. Apparently, the tiger had been close enough that when he shot it, the blood spattered on my pants. I never even saw the thing. We were in elephant grass about 9 feet tall. But somehow he saw the tiger and shot it. Even though it left a blood trail, we never saw the tiger. The PF wanted to go after the tiger but we all thought it was better not to especially since he had fired that grease gun and gave away our position. So we decided to get out of there.

About 4 months after that, Dave was bitten. You got to where you were watching behind you as much as front of you when you were on patrol.

Dr. Hodge practices orthopedic surgery in Bellingham, WA.

David Schwirian is a field engineer employed with a manufacturer of drilling accessories for quarries and mines, and resides in Springdale, AR.

H. Paul Churchill is a retired auto worker and resides in Port Huron, MI.

The Disappearing Hospital Ship

The Realities of Network Centric Warfare and its Implications for Future Navy Medical Support

CAPT Arthur M. Smith, MC, USNR (Ret.)

During the past several years, numerous proposals have been articulated within the pages of *Navy Medicine*, as well as other military journals, regarding hospital ship replacement platforms. Given the fact that the existing vessels were converted from tanker hulls to highly sophisticated medical support platforms within the context of a Cold War scenario, many well-meaning suggestions have been offered for converting various retired amphibious ship platforms into smaller more agile repositories for the sick and injured during conflict. Several of these "concept"ships have been those offering greater access to both surface and airborne casualty conveyance vehicles, as well as shallower drafts, implying compatibility with greater numbers of ports bearing less developed navigational sophistication. In this era of missile-based warfare, as well as potential terrorist interdiction, some proposals have also been offered to stretch the limits of "protected neutrality" offered by the Geneva and Hague Conventions to these vessels, by equipping them with encrypted communications, anti-missile chaff or other missile defense equipment, as well as heavy antipersonnel machine guns to obviate threats within harbors and sites of restricted maneuvering. How appropriate are all of these proposals?

Missing from all these aforementioned proposals has been the reality that every type of military logistical support mechanism, including medical services, must adapt to the nature of the conflict being addressed, and ultimately to the operational concepts being employed by the combatant commanders. Unfortunately, future concepts of war fighting do not provide inclusion of medical support vessels as we have known them in the past. The image of the white painted hospital ship offering sanctuary, mercy, hope, comfort, benevolence, and tranquillity is now drifting into the misty haze of the past. Furthermore, Pentagon officials have taken due note of the fact that in conjunction with

recent tsunami relief operations in the littorals of the Indian Ocean and Bay of Bengal, while official notification of activation of USNS *Mercy* (T-AH 19) was received from the Commander in Chief, Pacific Fleet on 1 January 2005, the ship did not arrive off the coast of Bandeh Aceh, Indonesia and commence relief operations until 6 February. Likewise, during prior support of Operation Desert Shield during conflict in the Middle East, the ship had been activated on 9 August 1990 but did not arrive in the Arabian Gulf until 15 September 1990. Such protracted time lines may not bear compatibility with projected concepts of future sea-based war fighting.

In 1945, the United States had access to 170 military bases worldwide. By 2005, the number dropped to 26. Despite this fact, the U.S. military is still expected to be ready to respond to future contingencies and natural disasters around the world, often without the manpower and other resources associated with previous shoreside military bases. Furthermore, fixed land bases ashore could become vulnerable in the future to enemy attack from weapons such as cruise missiles or short-range ballistic missiles. As such, new visions of the future have evolved, which would revolutionize how this nation intends to manage its forces, plan its operations, and project military power. These will have a direct impact on future concepts of Navy medical support.

One well known form of expeditionary operation in the past was the amphibious assault, an attack mounted from the sea against a hostile shore, such as the famous D-Day invasion of 1944. Amphibious assaults were perfected during the island-hopping campaign in the Pacific in World War II, and continued during the Korean War, when Marines stormed ashore at Inchon. That latter war marked the last time the Navy and Marine Corps together conducted an opposed amphibious assault. More recently, planners of Navy expeditionary operations theorized use of the sea as a high-speed avenue of maneuver to get Marines quickly to a potential hotspot—by either direct forcible coastal entry, and absorbing potentially significant opposition, or by avoiding defended beaches or coastal approaches and rapidly building up combat power on adjacent friendly shores. To accomplish that task, the Navy has maintained a substantial number of ships designed to deliver Marines ashore and to support them from the sea. Many of these craft are reaching, or have exceeded, the furthest extreme of their service lives.

Under the prevailing contemporary concept of operations for conducting amphibious expeditionary operations, the Navy and Marine Corps would first establish a foothold, or lodgment ashore, and then use that foothold as a base from which to conduct operations against the desired ashore objective. In general, it had previously taken between 30 and 45 days to move a Marine Expeditionary Brigade of about 16,000 Marines, their equipment, and aircraft, from the United States to a distant theater of operations. In the 1980s that time line was cut to approximately 17 to 20 days due in part to the creation of the Maritime Preposition Force, the latter composed of three squadrons of large cargo ships laden with military equipment and supplies with civilian mariner crews, strategically located in Reduced Operating Status in Diego Garcia, Guam/Saipan, and the Mediterranean. Each squadron is capable of supporting a Marine Brigade for a month. These groups are ready to deploy and off-load their cargo at virtually any port in the world on short notice. War fighters can then be flown into theater to marry up with their gear, enabling them to respond to contingencies faster and with greater force. Packaging the material for a brigade, and basing the ships at strategic spots around the globe, helped cut deployment times by half. One of the remaining and largest handicaps of the present arrangement, however, continues to be the "iron mountain" of weapons and materials unloaded and moved ashore from Roll-on Roll-off transport ships, and other forms of transports (most of which require an accommodating port) and then guarded, allocated to staging areas, and integrated with the force structure being constituted nearby.

Sea-Basing: the Future

More recently, the Navy and Marine Corps have been developing an even newer concept of operations for conducting operations ashore called enhanced networked sea-basing, or sea-basing, for short. It is an emergent concept that emphasizes the Navy's ability to provide forward logistics to a joint force in the absence of secure access to land

bases. Under the sea-basing concept, the Navy and Marine Corps would launch, direct, and support expeditionary operations directly from a base at sea, without necessarily establishing any intermediate lodgment base ashore. Recent wars in Afghanistan and Iraq have underscored uncertainties about access to overseas bases. Because the Navy operates at sea, it potentially can provide a secure alternative to land bases that is both less vulnerable and less dependent upon the goodwill of foreign nations. Sea-basing is a concept that responds to this growing need for flexible, mobile sites, by binding them together with computer networking technology, and tying together the personnel, ships, aircraft, and installations of the sea-base into a series of highly integrated local and wide area networks. These would be capable of rapidly transmitting critical information over a grid, operating under the nominal umbrella of "Network Centric Warfare." Hopefully this will make war fighting resources available whenever and wherever needed.

Launching expeditionary operations directly from a base at least 25 miles out at sea would theoretically enhance the survivability of the attacking Navy-Marine Corps force by putting the base beyond the of range of shorter-range enemy weapons and targeting sensors, and by permitting the sea to be used as a medium of maneuver for evading detection and targeting by longer-range enemy weapons and sensors.

A second rationale for sea-basing is that by eliminating the intermediate land base, in essence the logistical "middleman," sea-basing will permit the Marine Corps to initiate and maintain a higher pace of operations against the desired objective, thus enhancing the effectiveness of the operation.

Under sea-basing, certain functions previously carried out from the intermediate land base, including command and control and logistics (including Level II medical support), would be transferred back to the ships at sea that collectively constitute the sea-base. To be fully responsive to future security and humanitarian requirements, however, and to have a true sea-base, the Navy needs new capabilities for rapid at-sea arrival and assembly of units, currently expected to entail closure of the manpower component of a full expeditionary brigade of 16,000 personnel and their equipment into the area of proposed operations within 10 days of issuance of a National Command order. This is to be followed by both vertical insertion of a combat battalion by air (via MV-22 Osprey and the as yet conceptual advanced heavier weight-carrying CH-53X rotary aircraft or an as yet proposed quad rotor rotary wing aircraft). This foce would be augmented by the simultaneous over-the-water sea transport of a battalion within 8-10 hours of arrival, encompassing one period of darkness, accompanied by indefinite sea-based sustainment of forces ashore, as well as timely reinforcement of onshore forces as needed.

An additional rationale for sea-basing is that it could permit the Marine expeditionary force, once the operation is completed, to expedite reconstitution and redeployment—that is, get back aboard ship and be ready for conducting another operation somewhere else, within 30 days after completion of the operation—more quickly than under the current concept of operations.

The sea-base being referred to is not a single ship, but rather a collection of amphibious ships, maritime preposition ships, and intra-theater and sea-shore connector ships that is supported by an aircraft carrier strike group. As envisioned today, a sea-base would be able to deploy 16,000 U.S. Marines and their equipment entirely from the sea. Although the exact composition of a sea-base is still evolving, defense leaders see it as a virtual floating base composed of more than a dozen ships, including amphibious assault ships, auxiliary vessels, and connector vessels. One of the key components of a future sea-base would likely be a new squadron of ships—Maritime Prepositioning Force (Future) ships, or MPF(F). These new ships would be slated to be added to the Military Sealift Command's Maritime Prepositioning Squadrons.

In order to take prepositioning to the next level of providing increased sea-based support to expeditionary units, the Navy will need to examine new ship designs that allow for at-sea force assembly through strategic sealift, selective offload of appropriate equipment, underway cargo transfers in relatively high sea states, and rapid long range ship-to-shore logistics. One possibility is the conversion

of large commercial carriers, or alternatively the de novo construction of MPF(F) ships specifically designed for such use. Such ships could form the core of the future MPF. New connector ships for expedited movement between the sea-base and the shore are also needed, including a replacement for the short-range Landing Craft Air Cushion (LCAC) platforms, as well as acquisition of larger high speed catamaran type vessels for personnel and equipment transfer.

While the current cadre of prepositioning ships operated by the Military Sealift Command, such as the Large Medium Speed Roll On/Roll Off ships, usually off-load their cargo pier-side, new MPF(F) ships would need to be able to load and off load cargo on to other platforms while at sea. When technically feasible, this would make equipment and supplies easier to deliver to regions where port facilities are not accessible or have been destroyed by natural disasters or war.

For this purpose, newly designed Mobile Landing Platforms, or MPLs, are being developed to facilitate at-sea transfers. These would be platforms that partially submerge in water and allow cargo to float on and off, linking roll-on/roll off cargo ships to small, barge-like water craft that can deliver equipment from the sea-base to points ashore.

It is anticipated that the seagoing platforms of the sea-base would consist of ships of an Expeditionary Strike Group and a Carrier based strike group, united with ships of the maritime prepositioning force, which, as a whole, would serve to sustain ground, sea, and air operations after launching, with logistic support, command, control, communications, computers, intelligence, surveillance, and reconnaissance capabilities.

It is likewise envisioned that ships of the MPF(F) will provide all logistic requirements, including berthing for over 16,000 personnel, as well as extensive medical support modules containing surgical specialty availability (known as echelon Level III care). The latter "modules" would include specialized and trained personnel, appropriate equipment, and adequate quantities of supplies to match operational exposure of combatant personnel, presumably incorporating vascular and neurosurgical capabilities, these same modules cumulatively operating under "established hospital standards of care," and utilizing appropriate nursing operating procedures.

Anticipating a functional casualty regulating system capable of directing casualties to the most appropriate afloat facilities utilizing unfettered communications available under the network centric umbrella, it is to be expected that care for less lethal injuries would be administered at the Level II medical facilities within the LHA, LHD, and LHA(R) ships of the Expeditionary Strike Group.

"Jointness"and Medical Support

Most notably, the Defense Department has also expressed some interest in sea-basing as a potential joint concept involving Army and Air Force as well as Navy and Marine Corps. A Defense Science Board (D.B.) report of 2003 repeatedly expressed the view that sea-basing should be developed as a joint operational concept, and recommended the creation of a joint DOD office to lead the effort. The foreword to the D.B. report states:

"A central authority must orchestrate the development of sea-basing concepts, systems, and concepts of operations. History suggests that sea-basing has never been exclusively limited to Navy and Marine operations. The Air Force and particularly the Army must participate in the development and use of this joint military operational capability which lies at the intersection of traditional special operations forces, Marine, and Army operations. Sea-basing represents a crucial option for future warfare by all the Services, and an important element in the transition between early entry and follow-on operations. A joint program authority must lead the effort." The report adds that "achieving both interoperability and intermodality transfer demands a seamless, rapid and efficient design that is fully joint." The report further notes that sea-basing must become something more than just the property of the Navy and Marine Corps. "What is crucial to moving the sea-base beyond its Navy and Marine Corps antecedents is the need for other services to tailor their seaborne prepositioning concepts to the maritime prepositioning force."

The report noted, as an example, the tailoring of at least part of the Army's 10th Mountain Division to operate off of a sea-base as it did during the Haiti crisis (in that case,

the deck of a nuclear powered aircraft carrier) which would substantially increase the nation's ability to project power from the sea.

Caveats for the Future

Following the bombing of the U.S. Marine compound at the Beirut International Airport in October 1983, and the confused casualty management sequelae, a medical review group chaired by RADM James Zimble evaluated the dysfunctional medical response to the tragedy. It specifically noted that smoothly running casualty support operations are critical, and that a lack of joint planning not only hampers the sharing of limited resources, but also creates confusion over responsibilities.

As the Zimble Report noted in 1984, and it raises potential problems that might be associated with future joint sea-basing, there was no comprehensive plan for the use of those medical assets already in place. The services' contingency plans were described as "stovepipe documents"—that is, their orientations were purely "vertical," i.e. intra-service, and they bore little relationship to each other. This was a direct result of the tendency of the services' medical components to support their own line units as if they were the only ones. Lacking was a joint medical staff to arbitrate differences. There was no mechanism for coordinating operations in wartime, or for resolving inconsistencies among the components' plans.

Among today's healthcare providers, major reservations will certainly persist regarding a postulated healthcare continuum within the sea-base concept that includes a minimal medical support structure accompanying ground forces ashore which is supported by a notional smoothly functioning medical communications and transportation system.

Such concerns are appropriately manifested, given the relative paucity of medical regulating exercises and medical communications bandwidth allocated during previous and current operational exercises. As such, therein lies the opportunity for effectively managing care for the sick and wounded casualties of future operational conflict within the newest network centric concept of sea-based operations.

A tri-service medical command and control element is proposed for incorporation within the combatant command organization of any future sea-base, for operational control over joint medical operations, for development and execution of joint medical plans within the sea-base, and also for insuring compatibility of the plans of individual components of a joint (or combined) command.

Responsibility for control of tactical and strategic components of the medical evacuation system must also be placed within this chain of command, as well as authority to integrate with the joint strategic patient evacuation system. Likewise, it is to be responsible for insuring that the system of communications within the joint level, as well as within the various components of the sea-base, is sufficient to support wartime medical operations.

Ultimately, without a well developed joint medical support plan supervised by a joint medical command and control element, and methodical testing of its worthiness, the Navy and other allied services may be unaware of all the constraints that might impede successful surging and timely engagement of their forces in response to crises within a future sea-base context.

Clearly, those continuing assertive recommendations for resurrecting past shadows of now vanished or vanishing hospital ships are themselves as antiquated as the vessels themselves. There is a "whole new world" of military operations to support medically, and the cognitive direction of all participants in military healthcare delivery must be likewise shifted to the realities of the future.

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Book Review

Ruff's War: A Navy Nurse on the Frontline in Iraq by CDR Cheryl Lynn Ruff, NC, USN (Ret.) and CDR K. Sue Roper, NC, USN (Ret.). Naval Institute Press, Annapolis, MD. 2005, 209 pages.

During the build-up to and beginning of Operation Iraqi Freedom, most of us stayed glued to our television sets watching the war unfold before our eyes. We watched as "war correspondents" traveled with the Marines and the Army. We witnessed firefights and ambushes almost daily. We watched Dr. Sanjay Gupta of CNN step out of his role as correspondent and into his role as surgeon helping military trauma teams perform delicate surgery.

What we didn't see were the terrible conditions these heroic trauma teams had to contend with on a daily basis. Poor lighting, lack of sanitation, and miserable living conditions were not evident in CNN's and Fox's daily news reports. These striking images are vividly portrayed in *Ruff's War: A Navy Nurse on the Frontline in Iraq*.

After spending most of her career working in hospital and fleet support settings, CDR Cheryl Ruff spent the last 6 months of her career in her most exciting and challenging assignment. While stationed at Naval Medical Center, Portsmouth, VA, Ruff learned that she, along with nearly 80 others from NMC Portsmouth, would be assigned to the Second Force Service Support Group deploying to Kuwait in preparation for what would become "Operation Iraqi Freedom."

At this point in the book, the frustration of "hurry up and wait" becomes readily apparent. For anyone who has ever been deployed, the memories and frustration will be felt with every page. From Portsmouth, VA, to Camp Lejeune, NC, to Kuwait, to Iraq, back to Kuwait, and finally back to Portsmouth, "hurry-up and wait" was the order of the day for CDR Ruff and the rest of Bravo Surgical Company, Second FSSG.

For those of us who weren't there, Ruff's description of Bravo Surgical Company's experiences in the deserts of Kuwait and Iraq during wartime, helps us understand what skill and sacrifice are all about. Giving up their safe, comfortable positions stateside to be forward deployed in support of the warfighters is one thing. Performing delicate, lifesaving surgeries in a tent with a dirt floor and little to no lighting is something else. In addition to facing the dangers of scud missile attacks and snipers, the surgical team also witnessed the true horror of war, most team members for the first time. Not only did Bravo Company care for our wounded Marines, but also for enemy prisoners of war (EPWs) as well as civilian women and children.

I highly recommend *Ruff's War* to both civilian and military personnel. For those readers in military medicine who have gone operational, you will find a renewed sense of pride in working to restore the health and well-being of the combat wounded. For those wanting to gain insight into what they can expect in providing healthcare in Operation Iraqi Freedom, this book is a good primer on the medical aspects of OIF.

—CTI2 Anthony Skrypek, USN, assigned to Navy Information Operations Command, Georgia.

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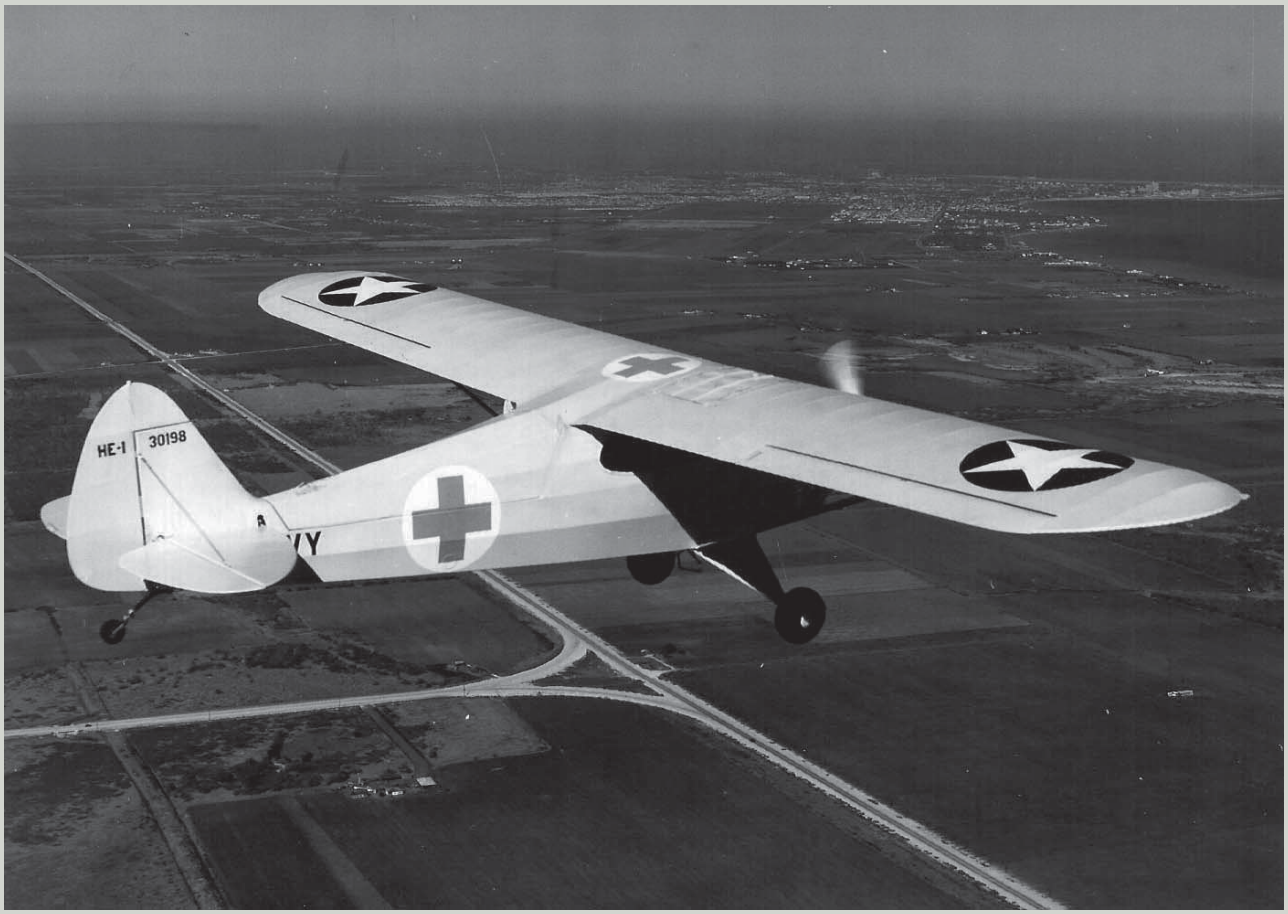

BUMED Archives

HE-1 ambulance plane. This version of the Piper Cub accommodated the pilot and one patient in a Stokes stretcher. The upper rear portion of the fuselage hinged upward, allowing access for patient and stretcher.

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